

Appeal Nos. 2014-1553 & 2014-1585

**United States Court of Appeals
FOR THE FEDERAL CIRCUIT**

TMI PRODUCTS, INC.,

Plaintiff-Appellant,

v.

ROSEN ENTERTAINMENT SYSTEMS, L.P.,

Defendant-Appellee.

Appeal from the United States District Court for the Central District of
California in Case No. 5:12-cv-02263, Judge R. Gary Klausner.

**CORRECTED BRIEF FOR APPELLANT
TMI PRODUCTS, INC.**

Reynaldo C. Barceló

Counsel of Record

BARCELÓ, HARRISON & WALKER, LLP

2901 West Coast Hwy, Suite 200

Newport Beach, California 92663

(949) 340-9736

Attorneys for Plaintiff-Appellant TMI Products, Inc.

CERTIFICATE OF INTEREST

Counsel for Appellant TMI Products, Inc. certifies the following:

1. The full name of every party represented by me is: TMI Products, Inc.
2. The name of the real party in interest represented by me is: TMI Products, Inc.
3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party represented by me are: None
4. The names of all law firms and the partners or associates that appeared for the party now represented by me in the trial court or agency or are expected to appear in this Court are:

BARCELÓ, HARRISON & WALKER, LLP:

Reynaldo C. Barceló
Joshua C. Harrison
Guadalupe M. García
David B. Walker

September 2, 2014

/s/ Reynaldo C. Barceló
Reynaldo C. Barceló

TABLE OF CONTENTS

CERTIFICATE OF INTEREST	i
TABLE OF CONTENTS	ii
TABLE OF AUTHORITIES	vi
STATEMENT OF RELATED CASES	x
STATEMENT OF JURISDICTION.....	1
I. STATEMENT OF THE ISSUES ON APPEAL	2
II. STATEMENT OF THE CASE AND FACTS	3
A. Brief Summary of the Events Leading to this Action.....	3
B. Course of Proceedings and Disposition Below	4
C. TMI’s Patented Technology and the Disclosure of the ’393 Patent	6
D. The Plain Language of Asserted Claim 1	12
E. The Prosecution History of the ’393 Patent	15
1. The claims as originally filed.....	15
2. The restriction requirement and election of species	17
3. The claim amendments – ultimately removing the “pivotal attached” limitation from Claim 1	19
4. The Examiner’s observations concerning the Vitito references ...	20
F. The Accused Rosen AV7900/CS9000 Products at Issue.....	22

G.	The Summary Judgment of Non-Infringement Challenged on Appeal.....	24
III.	SUMMARY OF ARGUMENT.....	27
IV.	ARGUMENT.....	30
A.	Standard of Review	30
B.	The Summary Judgment of Non-Infringement of the ‘393 Patent Was Improper and Should Be Reversed.	31
1.	The District Court reversibly erred in its construction of “the housing is structured to permit selective access to the input opening of the media player” and the related claim language.....	31
a.	The claim language requires adoption of TMI’s proposed interpretation.....	33
i.	The claim’s plain and ordinary meaning supports TMI’s proposed interpretation.	33
ii.	TMI’s interpretation does not read “selective” out of the claim.	35
iii.	Context within the asserted claim itself supports TMI’s interpretation.	38
iv.	Claim differentiation supports TMI’s position.	40
b.	The ’393 Patent specification confirms that TMI’s position is correct.	42
i.	It is improper in this case to import a pivoting limitation from a subset of the embodiments disclosed in the specification.....	42

ii.	Asserted Claim 1 covers Fig. 10 despite Rosen’s self-contradictions about the “housing.”	43
iii.	It is beyond reasonable dispute that Figures 9A-10 include a “housing.”	45
iv.	The housing of Figure 10 includes a recess 326 that can receive both the media player 308 and the display 306.....	47
c.	Nothing in the prosecution history of the ’393 Patent undermines TMI’s position.	48
i.	The prosecution history of Claim 1 plainly supports an interpretation of Claim 1 that includes Figure 10 and is not limited to pivoting embodiments.	48
ii.	The purpose and effect of a restriction/election is nonsubstantive.	49
iii.	The election in this case did not narrow claim scope.....	52
i.	Applicants did not need to “reinstate” canceled claims 3-5.	54
ii.	The Examiner’s comments regarding the Vitito references do not limit the scope of Claim 1.....	55
2.	Under the Proper Construction of Claim 1, the Summary Judgment of Non-Infringement Was Improper.	56
a.	The Rosen AV7900 product literally infringes all elements of Claim 1 of the ‘393 patent.....	57

b.	Rosen’s technical representative, Mr. Kucera, admitted infringement under TMI’s proposed interpretation.	60
c.	The Rosen CS9000 product variant also literally infringes all elements of Claim 1 of the ‘393 patent.	61
V.	CONCLUSION.....	62
	CERTIFICATE OF SERVICE	63
	CERTIFICATE OF COMPLIANCE.....	64
	ADDENDUM	

TABLE OF AUTHORITIES

	<i>Page(s)</i>
 Cases	
<i>3M Innovative Props. v. Tredegar Corp.</i> , 725 F.3d 1315 (Fed. Cir. 2013)	45
<i>ACTV, Inc. v. Walt Disney Co.</i> , 346 F.3d 1082 (Fed. Cir. 2003)	39
<i>Ancora Techs. v. Apple, Inc.</i> , 744 F.3d 732 (Fed. Cir. 2014)	49
<i>Anderson v Liberty Lobby, Inc.</i> , 477 U.S. 242 (1986)	31
<i>Bristol-Myers Squib v. Pharmachemie</i> , 361 F.3d 1343 (Fed. Cir. 2004)	50
<i>Charles Mach. Works, Inc. v. Vermeer Mfg. Co.</i> , 723 F.3d 1376 (Fed. Cir. 2013)	30
<i>Cybor Corp. v. FAS Tech. Inc.</i> , 138 F.3d 1448 (Fed. Cir. 1998) (en banc)	30
<i>Ecolab, Inc. v. Envirochem, Inc.</i> , 264 F.3d 1358 (Fed. Cir. 2001)	49
<i>Epistar Corp. v. Int’l Trade Comm’n</i> , 566 F.3d 1321 (Fed. Cir. 2009)	28
<i>Fortunet, Inc. v. Melange Computer Servs.</i> , 412 F. Supp. 2d 1071, 1084-87 (D. Nev. 2005) (<i>aff’d</i> 294 Fed. Appx. 609, 2008 U.S. App. LEXIS 19392 (Fed. Cir. 2008))	53-54

TABLE OF AUTHORITIES (cont'd)

	<i>Page(s)</i>
 Cases (cont'd)	
<i>In re Harnisch</i> , 631 F.2d 716 (CCPA 1980)	50
<i>In re Hengehold</i> , 440 F.2d 1395 (CCPA 1971)	50
<i>Hoechst Celanese Corp. v. BP Chems. Ltd.</i> , 78 F.3d 1575 (Fed. Cir. 1996)	43
<i>Intamin Ltd. v. Magnetar Techs., Corp.</i> , 483 F.3d 1328 (Fed. Cir. 2007)	18, 51
<i>Karlin Tech. Inc. v. Surgical Dynamics, Inc.</i> , 177 F.3d 968 (Fed. Cir. 1999)	41
<i>Kara Tech. Inc. v. Stamps.com Inc.</i> , 582 F.3d 1341 (Fed. Cir. 2009)	42
<i>Leever v. Carson City</i> , 360 F.3d 1014 (9th Cir. 2009)	31
<i>Lighting Ballast Control LLC v. Philips Elecs. N.A. Corp.</i> , 744 F.3d 1272 (Fed. Cir. 2014)	30
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005) (en banc)	30, 33, 39, 43
<i>Plantronics, Inc. v. Aliph, Inc.</i> , 725 F.3d 1343 (Fed. Cir. 2013)	28
<i>Salazar v. Procter & Gamble Col.</i> , 414 F.3d 1342 (Fed. Cir. 2005)	56

TABLE OF AUTHORITIES (cont'd)

	<i>Page(s)</i>
 Cases (cont'd)	
<i>SanDisk Corp. v. Kingston Tech. Co., Inc.</i> , 695 F.3d 1348 (2012)	31
<i>Sorensen v. Int’l Trade Comm’n</i> , 427 F.3d 1375 (Fed. Cir. 2005)	56
<i>Texas Instruments Inc. v. U.S. Int’l Trade Comm’n</i> , 871 F.2d 1054 (Fed. Cir. 1989)	49
<i>Thorner v Sony Company Entertainment America, LLC</i> , 669 F.3d 1362 (Fed. Cir. 2012)	32
<i>TMI Products, Inc. v. Rosen Entertainment Systems, LP</i> , Civil Action No. 5:09-CV-01300 (C.D. Cal. 2009)	4
<i>Uship Intellectual Properties, LLC v. United States</i> , 714 F.3d 1311 (Fed. Cir. 2013)	51
<i>Vitronics Corp. v. Conceptronic, Inc.</i> , 90 F.3d 1576 (Fed. Cir. 1996)	43
 Statutes and Rules	
28 U.S.C. § 1295(a)	1
28 U.S.C. § 1338(a)	1
35 U.S.C. § 121	50
35 U.S.C. § 112 ¶ 4	18
37 C.F.R. § 1.131	22
37 C.F.R. § 1.141(a).....	15, 49, 51, 55

TABLE OF AUTHORITIES (*cont'd*)

	<i>Page(s)</i>
Statutes and Rules (<i>cont'd</i>)	
Fed. R. App. P. 4(a)	1
Fed. R. Civ. P. 30(b)(6)	23, 58, 60, 61
Other References	
CHISUM ON PATENTS, § 12.03[2][E]	55

STATEMENT OF RELATED CASES

No other appeal in or from the same civil action was previously before this or any other appellate court.

Counsel for Plaintiff-Appellant is not aware of any other cases currently pending in this or any other court that will directly affect or be directly affected by this Court's decision in this appeal.

STATEMENT OF JURISDICTION

The U.S. District Court for the Central District of California (Judge R. Gary Klausner) had jurisdiction over the patent infringement action giving rise to this appeal pursuant to 28 U.S.C. § 1338(a).

This Court has jurisdiction over this appeal pursuant to 28 U.S.C. § 1295(a), as the Judgment entered on May 23, 2014 (A1–A2) was a final decision of the District Court.

The notice of appeal from the Judgment entered on May 23, 2014 was timely filed on June 10, 2014 in accordance with Fed. R. App. P. 4(a).

I. STATEMENT OF THE ISSUES ON APPEAL

Whether the District Court reversibly erred in granting summary judgment of non-infringement of Claim 1 in U.S. Patent No. 7,597,393 (the “’393 Patent”) based on its narrow construction of “the housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player,” where:

- a. the claim language has a plain and ordinary meaning, such that “selective access to the input opening of the media player” is permitted for “user positioning of the media storage device within the player” so long as the structure of the housing “defines a second opening and the media player is positioned within the recess such that the input opening of the media player is accessible through the second opening of the housing”;
- b. nothing in the plain language of the claim requires insertion of the District Court’s requirement that “the housing is structured to be capable of moving between an accessible and an inaccessible orientation”;
- c. the disputed claim language was not redefined in the specification and there was no disavowal of the full scope of the term; and

- d. there is ample evidence sufficient to support a finding of infringement under the plain and ordinary meaning of the claim language, and, as the District Court noted, “[u]nder Plaintiff’s proposed construction, Plaintiff is entitled to summary judgment of infringement.”

II. STATEMENT OF THE CASE

A. Brief Summary of the Events Leading to this Action

TMI Products, Inc. (“TMI”) is a family-owned company that makes high-quality interior automotive components. A273, A326–A327. For over twelve years, TMI has been a pioneering innovator and manufacturer of automobile headrest video entertainment systems. Among TMI’s innovations in this field are U.S. Patent Nos. 7,040,697 (the “’697 Patent”), 7,407,227 (the “’227 Patent”), and the ’393 Patent. The ’697, ’227, and ’393 patents all generally relate “to a head restraint for vehicle seats having an integrated video screen mounted therein.” *See, e.g.*, A52 at col. 1:23-24. Products embodying the inventions disclosed and claimed in these TMI patents enable vehicle rear-seat passengers to watch movies, play games, and perform various other entertaining and useful tasks, using systems that are embedded in the vehicle’s headrests.

Rosen Electronics, L.P. (“Rosen”), formerly known as Rosen Entertainment Systems LP, is a competitor of TMI in the automotive headrest entertainment product category. The parties to this action previously litigated over the same

patent family in *TMI Products, Inc. v. Rosen Entertainment Systems, LP*, No. 5:09-CV-01300, United States District Court for the Central District of California (the “2009 case”). A210; A212-218. In the 2009 lawsuit, the accused products were Rosen’s older models, generally designated as AV7000 and AV7500. A212–A219. TMI’s 2009 lawsuit prompted the parties discuss settlement early on. The parties settled the dispute by executing a Patent License Agreement (the “2009 Agreement”), and then TMI dismissed the lawsuit. A3–A4; A221–A222.

The parties operated under the 2009 Agreement without dispute until mid-2012. Then, TMI determined that Rosen was not paying royalties with respect to its newer AV7900/CS9000 models, though TMI contends that Rosen should have been paying royalties on them. The parties were unable to resolve this dispute amicably, and TMI initiated this action on December 21, 2012. A4.

B. Course of Proceedings and Disposition Below

TMI’s 2012 Complaint asserted patent infringement and breach of contract claims against Rosen. Relevant to this appeal, TMI asserts that Rosen infringes Claim 1 of the ’393 Patent.¹ In general terms, the Patent describes and claims

¹ TMI’s Complaint originally also included patent infringement allegations relating to the ’697 and ’227 Patents, as well as a breach of contract claim relating to the 2009 settlement agreement. A3–A4; A72–A83. TMI’s infringement claims as to the ’697 and ’227 Patents in this litigation were dismissed via the parties’ joint stipulation at the close of discovery, based on sales information produced by Rosen regarding the older AV7000/AV7500 products. A252–A253. TMI’s breach

various configurations for integrating video displays and media players (such as DVD players) into automobile headrests.

The District Court ordered that patent claim construction would be performed in the context of summary judgment proceedings. A183. Accordingly, at the close of discovery, TMI and Rosen filed motions for summary judgment of infringement and non-infringement, respectively. A11–A12. The parties’ briefs and related materials included their claim construction arguments.

No hearing was held on the summary judgment motions or the underlying claim construction issues. On April 30, 2014, the District Court issued an order that resolved the motions in Rosen’s favor. A11–A18. Specifically, the District Court construed the phrase “the housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player” from Claim 1 of the ’393 patent to require that “the housing is structured to be capable of moving between an accessible and an inaccessible orientation.” A17. The District Court examined physical samples of the accused devices *in camera*, and concluded that “[t]he accused products’

of contract claim was dismissed without prejudice on May 9, 2014, when the District Court declined to exercise pendent jurisdiction of that state-law claim. A20–A24. The District Court also granted partial summary judgment in favor of TMI on Rosen’s patent invalidity counterclaim, based on its finding that Rosen is contractually estopped by virtue of the 2009 Agreement from challenging the validity of the ’393 Patent, among others. A3–A10. This ruling is the subject of Rosen’s cross-appeal. A2624.

housing sits within the recess of the headrest, and cannot be manipulated to expose the input opening, which is always accessible from the top of the headrest.” A18. Based on its construction of Claim 1 and its factual findings regarding the accused products based on this examination, the District Court granted Rosen’s motion for summary judgment of non-infringement. *Id.*

Final Judgment was entered on May 23, 2014. A2. This appeal was timely filed on June 10, 2014 and challenges the summary judgment and the construction of the claim terms upon which it was based. A2621.

C. TMI’s Patented Technology and the Disclosure of the ’393 Patent

The ’393 Patent is directed to the field of automotive headrest entertainment systems, and generally describes and claims a head restraint for vehicle seats having an integrated entertainment system that includes a video screen and a media player. *See, e.g.*, A52 at col. 2:17-29. More specifically, the patent relates to a “media assembly” including a housing that receives a display and a media player (such as a DVD player), where the housing is coupled to a mounting structure within the seat back of the vehicle. A52 at col. 2:19-35.

Although not exhaustive of all the potential implementations that are covered by its claims, the ’393 Patent describes and illustrates several different exemplary embodiments. *See, e.g.*, Figs. 9A–12B (A38–A46), and the corresponding written description at A52 (at col. 2:17-67), A53 (at col. 3:1-11, col.

3:33-55, and col. 4:34-49), A56 (at col. 10:61-67), A57 (entire page), and A58 (col. 13:1 – col. 14:25). Figures 9A and 10, reproduced side-by-side below, provide a good introduction to the various system components and arrangements that are described and claimed in the '393 Patent.

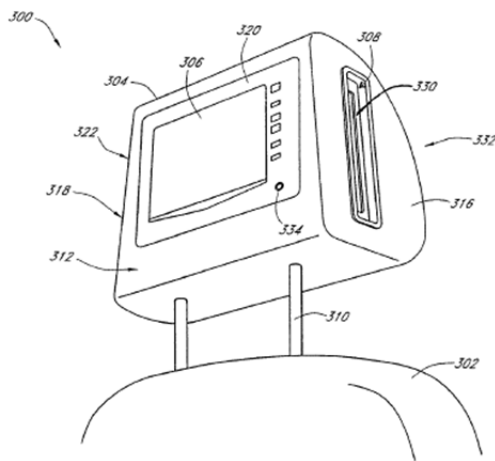


FIG. 9A

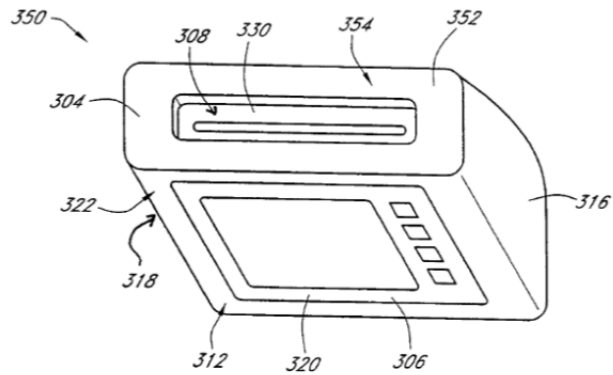


FIG. 10

A38; A41.

As described in the '393 Patent, Figure 9A “illustrates one embodiment of a video system 300 for a vehicle seat or seat back 302 having a head restraint 304 with an integrated video display or monitor 306 and a side-loading media player 308 mounted therein,” while Figure 10 illustrates “another embodiment of a video system 350 for the vehicle seat 302 having the head restraint 304 with the panel display 306 and a top-loading media player 308 mounted thereto.” A56 at col. 10:61-64; A57 at col. 12:60-63.

In these examples, the head restraint 304 is coupled to the vehicle seat or seat back 302 via posts 310 (A56, at col. 10:65-67), and the video monitor 306 is mounted within a rear section 312 of the head restraint 304 (A57, at col. 10:2-5). The media player 308 can be mounted either within a side section 316 (or 318) of the head restraint 304 (as in Figure 9A), or within an upper section 352 of the head restraint 304 (as in Figure 10). A57, at col. 11:19-31 & col. 12:60-67. The media player 308 “may comprise a generally known digital video disc (DVD), hard disc storage, memory chip, and the like player that can be electrically coupled to a video entertainment system including the illustrated video monitor 306 so as to provide video signals thereto for displaying of movies, television, internet web pages, video games, etc.” A57, at col. 11:37-43.

Consistent with these figures (as well as with all of Figures 9A-12B generally), the '393 Patent describes and claims a “media assembly,” which “includes a mounting structure that is coupled to the seat back of the vehicle,” “further includes a display [306] that displays media to a viewer sitting within the vehicle,” “further includes a media player [308] having an input opening into which a user can position a media storage device,” and “further includes a housing defining a recess having a first opening that receives both the display and the media player.” A52 at col. 2:19-32.

Among other features of the technology described in the '393 Patent, the Summary of the Invention describes a structural attribute of the "housing" that is of central importance in this appeal: "***The housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player.***" A52, at col. 2:35-38. This key phrase was included in the patent specification and relevant claims from the first day its corresponding patent application was filed (A629; A654), appears in claims 1-6 of the issued patent *verbatim* (A60, at col. 18:9-12 & at col. 18:48-51), and was never changed during prosecution. It is also entirely consistent with ***every single one*** of the relevant figures in the patent (*i.e.*, Figures 9A – 12B).

The relevant embodiments that are illustrated and described in the '393 Patent can be classified as belonging either to the "second opening" category (*e.g.*, Figures 9A–10) or to the "pivoting" category (*e.g.*, Figures 11A-12B).

In particular, as the patent explains, "[i]n one embodiment, the housing defines a second opening and the media player is positioned within the recess such that the input opening of the media player is accessible through the second opening of the housing," and "the housing is mounted to the mounting structure such that the second opening is accessible through a second outer surface of the seat." A52, at col. 2:43-49. Plainly, in this arrangement, the required structural attribute of the housing ("to permit selective access to the input opening of the media player to

permit user positioning of the media storage device within the player”) is implemented by the “second opening” that the housing defines, so that the user may selectively access (*i.e.*, either access or not access) the input opening of the media player through that second opening.

In the very next two sentences, the patent describes two specific implementations of this “second opening” configuration. First, “[i]n one embodiment, the second outer surface of the seat comprises a side surface of the seat.” A52, at col. 2:49-50. A quick glance readily reveals that Figures 9A-9C conceptually illustrate some possible implementations of this configuration. Second, in another embodiment, “the second outer surface of the seat comprises a top surface of the seat.” A52, at col. 2:50-52. Plainly, Figure 10 corresponds to an example of this alternative “second opening” implementation.

Importantly, none of these embodiments of the housing arrangement that implement the “second opening” approach require that “the housing is structured to be capable of moving between an accessible and an inaccessible orientation,” the limitation that the District Court imported into Claim 1 (*see* A17). Instead, as shown in Figures 9A, 9B, 9C, and 10 and as described in the corresponding text, in these configurations, the required structural attribute of the housing (“to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player”) is satisfied by incorporating the

“second opening” that the housing defines, so that the user may selectively access the input opening of the media player through that second opening. The second opening in the housing in these implementations permits selective access by the user to the input opening of the media player because, through the second opening, the user can select if and when (and with what type of media storage device) to access the input opening of the media player.

In contrast, the ‘393 Patent also describes and illustrates alternative implementations that *do* require that “the housing is structured to be capable of moving between an accessible and an inaccessible orientation.” In particular, these are the “pivoting” embodiments that are depicted in Figures 11A – 12B (A42 – A46) and described in the corresponding text of the patent (A52, at col. 2:60-67; A53, at col. 3:1-11 & at 4:45-49; A58, at col. 13:22 – col. 14:24). For example, the embodiment corresponding to Figure 11C (A44, reproduced below), illustrates “the panel display 306 and media player 308 partially deployed or pivoted outward from the head restraint 304 of the vehicle seat 302.” A58, at col. 13:51-53.

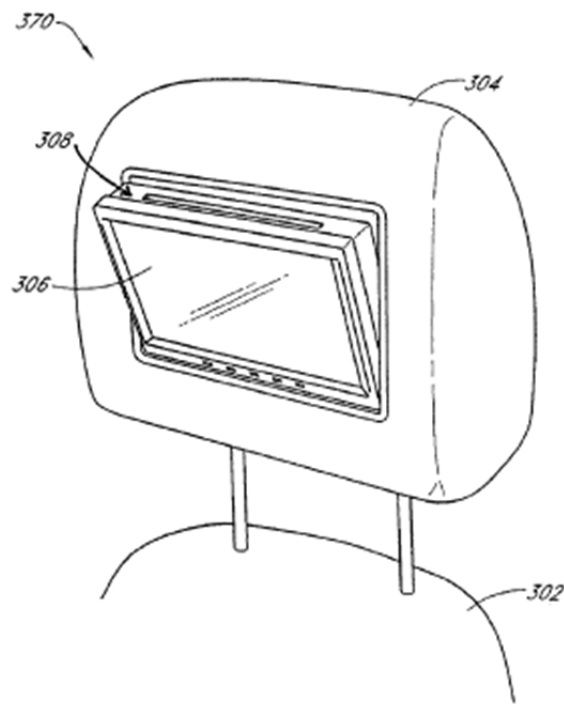


FIG. 11C

Unlike in the “second opening” implementations (*e.g.*, those shown in Figures 9A-10), in the “pivoting” implementations of Figures 11A-12B, the structural requirement of the housing (“to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player”) *is* plainly provided by pivoting mechanisms through which “the housing is structured to be capable of moving between an accessible and an inaccessible orientation.”

D. The Plain Language of Asserted Claim 1

Harmoniously with the two different housing structure solutions that are described in the '393 patent specification (*i.e.*, the “second opening” approach and

the “pivoting”/“moving” approach), the relevant claims of the issued patent (*i.e.*, claims 1-6) also maintain this distinction between the two solution approaches.

Specifically, some of the claims (*e.g.* claim 4) plainly include language requiring the housing to be pivotably attached to the mounting structure, so that the display may be rotated to an extended position where the input opening of the media player is exposed, for example as shown in Figure 11C. A60, at col. 18:31-64, especially at lines 57-64.

Other claims (*e.g.*, Claim 1) do ***not*** include any language requiring the housing to be pivotably attached to the mounting structure, but rather simply require that the media player be accessible through a second opening in the housing, for example as shown in Figure 10. A60, at col. 17:59 – col. 18:21, especially at col. 18:18-21.

The plain language of asserted Claim 1 confirms the absence of any language requiring the housing to be pivotably attached to the mounting structure (compare to claim 4), or that “the housing is structured to be capable of moving between an accessible and an inaccessible orientation.” Instead, Claim 1 simply

requires that the media player be accessible through a second opening in the housing.²

² Claim 1 is reproduced below in its entirety, with the language most relevant to this appeal highlighted, and with the individual claim elements assigned letters for subsequent reference herein:

- 1(a) A media assembly adapted to be installed into a seat back of a vehicle, the assembly comprising:
- 1(b) a mounting structure that is coupled to the seat back of the vehicle
- 1(c) wherein the seat back defines a first outer surface visible to a viewer sitting in a back seat of the vehicle;
- 1(d) a display that displays media to a viewer sitting within the vehicle;
- 1(e) a media player having an input opening into which a user can position a media storage device
- 1(f) wherein the media player provides signals to the display to thereby induce the display to visually display the contents of the media storage device;
- 1(g) a housing defining a recess having a first opening that receives both the display and the media player
- 1(h) such that the display is positioned proximate the first opening of the recess with the media player positioned inward in the recess from the first opening
- 1(i) such that the media player does not impede visual access to the display
- 1(j) wherein **the housing is structured to permit selective access to the input opening of the media player** to permit user positioning of the media storage device within the player and
- 1(k) wherein the housing is adapted to be coupled to the mounting structure within the seat back of the vehicle to thereby retain the housing within the seat back such that the display is positioned adjacent the outer surface of the seat back;
- 1(l) wherein **the housing defines a second opening**
- 1(m) and the media player is positioned within the recess
- 1(n) such that **the input opening of the media player is accessible through the second opening of the housing**.

E. The Prosecution History of the '393 Patent

1. The claims as originally filed

As originally filed on April 5, 2004, then-pending claims 2-5 were plainly directed to the non-pivoting “second opening” embodiments (*i.e.*, the embodiments shown in Figures 9A- 10), while then-pending claims 6-10 were clearly directed to the “pivotally attached” / “pivotally mounted” embodiments (*i.e.*, the embodiments shown in Figures 11A- 12B). A654 – A655.

Since both groups of these claims depended from Claim 1 (as originally filed), it necessarily follows that Claim 1 (as originally filed) was a generic “linking claim” that was broad enough to encompass ***both*** the non-pivoting “second opening” embodiments ***and*** the “pivotally attached” embodiments. *See* 37 C.F.R. § 1.141(a). The important hierarchical relationship among the first eight originally-filed claims and their corresponding exemplary embodiments is depicted graphically on the next page. As the graph demonstrates, since originally filed claims 3-5 were plainly directed to the embodiments of Figs. 9A-10 (and since originally filed claims 3-5 depended from originally filed Claim 1), the limitations of originally filed Claim 1 were applicable to the embodiments of Figs. 9A-10.

First 8 Claims As Originally Filed (A654 – A655, A675, A678)

1. A media assembly adapted to be installed into a seat back of a vehicle, the assembly comprising: a mounting structure that is coupled to the seat back of the vehicle wherein the seat back defines a first outer surface visible to a viewer sitting in a back seat of the vehicle; a display that displays media to a viewer sitting within the vehicle; a media player having an input opening into which a user can position a media storage device wherein the media player provides signals to the display to thereby induce the display to visually display the contents of the media storage device; a housing defining a recess having a first opening that receives both the display and the media player such that the display is positioned proximate the first opening of the recess with the media player positioned inward in the recess from the first opening such that the media player does not impede visual access to the display
wherein the housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player
 and wherein the housing is adapted to be coupled to the mounting structure within the seat back of the vehicle to thereby retain the housing within the seat back such that the display is positioned adjacent the outer surface of the seat back.

2. The assembly of Claim 1, wherein the housing defines a second opening and the media player is positioned within the recess such that the input opening of the media player is accessible through the second opening of the housing.
3. The assembly of Claim 2, wherein the housing is mounted to the mounting structure such that the second opening is accessible through a second outer surface of the seat.
4. The assembly of Claim 3, wherein the second outer surface of the seat comprises a side surface of the seat.
5. The assembly of Claim 3, wherein the second outer surface of the seat comprises a top surface of the seat.

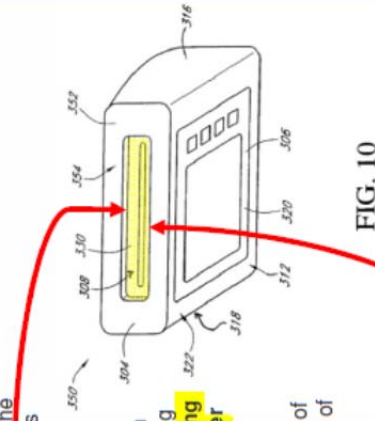


FIG. 10

6. The assembly of Claim 1, wherein the housing is pivotally mounted with respect to the mounting structure such that the display screen can be adjusted for improved visibility to the viewer.
7. The assembly of Claim 6, wherein the housing comprises a ball and the mounting structure comprises a socket such that the ball is positioned within the socket to permit adjustment of the housing with respect to the mounting structure in two separate directions.
8. The assembly of Claim 1, wherein the housing is pivotally attached to the mounting structure so as to be rotatable between a recessed position wherein the display is positioned substantially flush with the first outer surface of the seat and the input opening of the media player is hidden from view within the seat and an extended position wherein the input opening of the media player is exposed from the seat so as to be accessible to the viewer.

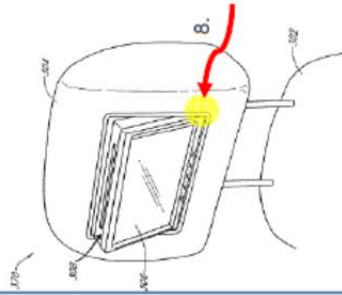


FIG. 11C

2. The restriction requirement and election of species

On May 10, 2007, the Examiner issued a restriction requirement that considered then-pending method claims 30-33 to be a distinct “Invention II” (and all other claims to pertain to “a media assembly for a headrest” referred to as “Invention I”). A687–A689. The applicant was then also required to elect a subgroup to “be restricted if no generic claim is finally held to be allowable.” A690.

The applicant’s responsive election of July 10, 2007 expressly included then-pending Claim 1, which was the predecessor to the now-asserted Claim 1:

In response to the Restriction Requirement mailed May 10, 2007,
Applicant hereby elects Group I (**Claims 1-29** and 34-41), subgroup
1C (Figures 11A-12B) for prosecution in the present application.
Applicant makes this election without traverse and respectfully
requests prompt examination on the merits of this elected claims.

A695 (emphasis added).

Although “subgroup IC” was also elected, pertaining to the pivoting embodiments, then-pending Claim 1 was a generic linking claim that covered both

the pivoting embodiments (subgroup 1C) and the non-pivoting embodiments (subgroups 1A and 1B, and the embodiment of Figure 10).³

Independent Claim 1 was generic to both the pivoting and the non-pivoting embodiments, according to the well-settled principle that an independent claim is at least as broad as every dependent claim that depends from it. *See* 35 U.S.C. § 112 ¶ 4 (“[A] claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed.”); *see also Intamin Ltd. v. Magnetar Techs., Corp.*, 483 F.3d 1328, 1335 (Fed. Cir. 2007) (“An independent claim impliedly embraces more subject matter than its narrower dependent claim.”).

At the time of the restriction and election, all of then-pending claims 2-10 were dependent from independent Claim 1. Specifically, then-pending dependent claims 2-5 of the originally filed patent application were directed to the non-pivoting embodiments (subgroups 1A and 1B, and the embodiment of Figure 10), while then-pending dependent claims 6-10 were directed to the pivoting embodiments (subgroup 1C). Hence, the elected independent Claim 1 must have been generic to both the non-pivoting and pivoting embodiments.

³ TMI’s briefs included a tabular summary of the claims of U.S. Pat. App. No. 10/819,341 as originally filed, and their disposition in view of the election of species. A1373–A1375.

For a period of time during the prosecution history, the examiner did not consider independent Claim 1 to be allowable. Hence, “there being no allowable generic or linking claim” (emphasis added), the examiner withdrew claims 3-5 on July 27, 2007 as being drawn to a non-elected subgroup. A705. The applicant canceled claims 3-5 on February 9, 2009, but did not abandon their scope because still-pending generic Claim 1 was indisputably broader than any of them. A760; A764 (“No Disclaimers or Disavowals”).

As explained below, since generic Claim 1 was ultimately allowed, the subgroup election never resulted in a subgroup restriction; only Invention II (method claims 30-33) was ultimately restricted out of the case.

3. The claim amendments – ultimately removing the “pivotally attached” limitation from Claim 1

The prosecution history did not end with the restriction requirement and the responsive election that were described above. On October 26, 2007, pending Claim 1 was amended to add the “pivotally attached” limitation of originally filed Claim 8. A724. Only then (and temporarily) did pending Claim 1 exclude the “second opening” embodiments shown in Figs. 9A-10. However, Claim 1 was later amended again, on May 14, 2008, to expressly *remove* the “pivotally attached” limitation, so that Claim 1 once again became generic to both the pivoting and non-pivoting embodiments. A737–A738. Hence, any disavowal of

claim scope that was arguably effected by the narrowing amendment of October 26, 2007, was subsequently undone by the ***broadening*** amendment of May 14, 2008.

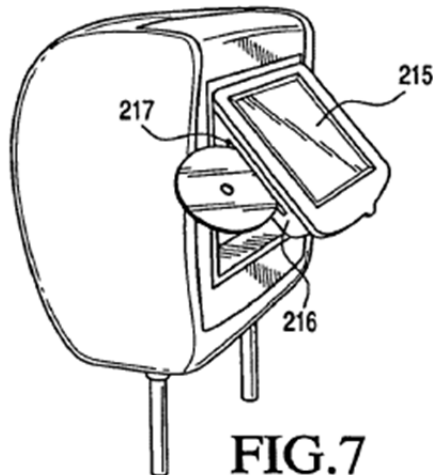
Finally on February 9, 2009, Claim 1 was further amended to add the “second opening” limitation of dependent claim 2. A760. This amendment would not make any sense unless Claim 1 had been generic to both pivoting and non-pivoting embodiments beforehand. After the February 9, 2009 amendment, Claim 1 became specifically directed to the “second opening” embodiments, such as those shown in Figures 9A-10.

The February 9, 2009 amendment triggered allowance of the ‘393 patent. A771. Hence, although the scope of Claim 1 changed, changed back, and then changed again during prosecution, Claim 1 was ultimately allowed with a scope that plainly ***included*** the “second opening” embodiments such as those shown in Figures 9A-10.

4. The Examiner’s observations concerning the Vitito references

In the Office Action that was mailed on July 27, 2007, the Examiner rejected the then-pending version of Claim 1 (among other claims) as allegedly anticipated by the Vitito ’973 reference (*i.e.*, U.S. Patent Published App. No. 2007/0102973).

A707–A708. The Examiner focused on Figure 7 of the reference, which is reproduced below:



In relevant part, the Examiner asserted that, as disclosed in the Vitito '973 reference, “the housing is structured to permit selective access, because it pivots in and out of carrier member (17) [referring to Fig. 1 of the Vitito '973 reference], to the input opening (un-illustrated) of the media player (216) to permit user positioning of the media storage device (unlabeled) within the player (216)....” A708.⁴

Plainly, and logically, by this assertion the Examiner simply alleged that Vitito’s pivoting arrangement disclosed *an example* of a “housing structured to permit selective access.” The Examiner *never even asserted* that Vitito’s pivoting mechanism was the *only* solution that could provide a “housing structured to

⁴ The same assertion was repeated by the Examiner in the Office Action that was mailed on November 14, 2007. A1102.

permit selective access.” Moreover, the applicants never agreed with or commented on the Examiner’s argument that Vitito disclosed an example of such a housing structure, much less that it disclosed the *only and definitional embodiment* of such a structure. Instead, the applicants successfully eliminated the Vitito ’973 reference (as well as another Vitito reference) as prior art by swearing behind it pursuant to 37 C.F.R. § 1.131 and establishing prior invention. A745; A749–A757; A1119; A1123–A1131.

F. The Accused Rosen AV7900/CS9000 Products at Issue

The District Court summarized the basic relevant features of the Rosen AV7900/CS9000 products that are accused of infringing Claim 1 of the ’393 Patent as follows: “Both the AV7900 and CS9000 consist of a media player located in the rear of a headrest. Both have a slot located at the top of the headrest for insertion of media. The screens of both products lie flush with the headrest.”

A13. Rosen’s own description of these products is in complete agreement:

Rosen’s products are headrest entertainment[] systems, where each headrest contains a video monitor viewable at the rear surface of the headrest. Depending upon the particular version of the system, the headrest may or may not contain a video player. In each headrest with a video player, there is either a single DVD player or a single, so-called iDoc player, but in all cases the video monitor and the video

player are fixed in position relative to the headrest and all other structures in or on the headrest. Access to the input opening of the DVD player and to each input of the iDoc player is through a top surface of the headrest.

A801. Thus, as shown in the figures below, the Rosen AV7900/CS9000 products are not materially different from the claimed embodiment shown in Fig. 10 of the ‘393 patent.

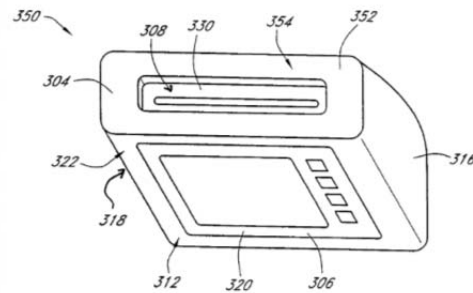


FIG. 10

A801; A41.⁵ The likeness is not a coincidence. After the 2009 litigation, Rosen intentionally designed the newer AV7900/CS9000 products to be like Figure 10 of the ‘393 patent.⁶ Thus, the parties’ dispute is whether Rosen’s Figure-10-inspired top-loading design is one in which “the housing is structured to permit selective

⁵ Rosen apparently agrees. The corporate representative designated under Fed. R. Civ. P 30(b)(6) to speak for Rosen as to the structure and operation of the accused products, Curt Kucera, admitted under oath that Rosen’s primary non-infringement rationale for the AV7900 product applies in the same way to Fig. 10 of the asserted ‘393 patent. A1440–A1441, at 83:6–84:21.

⁶ See A800, at 1:1-4.

access to the input opening of the media player to permit user positioning of the media storage device within the player.”

Therefore, the parties agree that “...no factual dispute exists as to the structure or operation of Rosen’s products,” and that “[t]he only dispute is a legal issue as to the scope of the patent claim, which is for this Court to decide.”⁷

G. The Summary Judgment of Non-Infringement Challenged on Appeal

The District Court construed the claim term “the housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player” which appears in claims 1 and 4 of the ’393 Patent. A13. TMI argued that the term should be construed broadly, in accordance with its plain and ordinary meaning, and, for claim 1, should include the embodiments depicted in Figures 9A-10. TMI’s position was – and always has been – that “selective access” in Claim 1 refers to the user’s ability to select if and when (and with what type of media storage device) to access the input opening of the media player, and that it is simply the claimed “second opening” in the housing that permits the claimed selective access by the user.

⁷ A801, at 2:4-6.

Rosen, instead, proposed the following interpretation, effectively attempting to limit the claim to read only on the pivoting/moving embodiments such as those depicted in Figures 11A-12B:

The housing is movable between a deployed orientation wherein the user can insert the media storage device in the input opening of the media player and a retracted orientation wherein the user does not have access to the input opening of the media player, and the input opening of the media player is not accessible through a second outer surface of the seat back, such as a top surface or a side surface of the seat back.

A14.⁸ Rosen's argument was based in large part on its characterization of the prosecution history, as well as on its narrow reading of the claim language and of the patent specification.

The District Court adopted a slightly modified version of the first part of Rosen's proposal, and limited "the housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player" to mean that that "the housing is structured to be

⁸ Section III.C of the District Court's claim construction and summary judgment order (A14) contains three potentially confusing typographical errors. The three instances of "Plaintiff" in that section should obviously be changed to "Defendant."

capable of moving between an accessible and an inaccessible orientation.” A17.

The District Court apparently based this ruling on four subsidiary findings:

- 1) The District Court concluded that TMI’s plain meaning construction would render the terms “selective” and “to permit selective access” redundant (A15);
- 2) The District Court found that “[a]s to Defendant’s disclaimer argument, the evidence in the prosecution history is inconclusive” (A16);
- 3) Based on the Examiner’s characterization of the Vitito references (*see* Section II.E.4, *supra*), the District Court decided that “[t]he prosecution history does, however, lend strong support to Defendant’s interpretation” because, according to the District Court, “the examiner understood ‘structured to permit selective access’ to mean capable of being made accessible or inaccessible by, for instance, pivoting in the recess” (A16); and
- 4) The District Court rejected TMI’s argument that Claim 1 must be construed to read on the “second opening” embodiments such as the implementation depicted in Figure 10, based on its conclusion that “Figure 10 is simply too ambiguous to overcome the convincing evidence supporting Defendant’s construction of Claim 1.” A17.

The District Court then examined physical samples of the accused devices *in camera*, and concluded that “[t]he accused products’ housing sits within the recess of the headrest, and cannot be manipulated to expose the input opening, which is always accessible from the top of the headrest.” A18. Based on its construction of Claim 1 and this factual finding, the District Court granted Rosen’s motion for summary judgment of non-infringement. *Id.*

III. SUMMARY OF ARGUMENT

The summary judgment of non-infringement of the ‘393 Patent was improper and should be reversed.

The claim construction adopted by the District Court erroneously imports specific features relating to “moving between an accessible and an inaccessible orientation” that are associated with *some* of the many embodiments disclosed in the ‘393 patent specification (*i.e.*, the “pivoting” embodiments of Figures 11A-12B) into the broad language of Claim 1 in the absence of any redefinition of the relevant claim terms or any clear disavowal of claim scope.

The District Court’s approach appears to be based on an unwarranted narrow reading of the plain language of the claim, as well as on unjustified skepticism that the claim language means what it says. In particular, the District Court’s analysis went off-course when the District Court concluded at the outset that TMI’s proposal rendered the word “selective” in the claim redundant. As TMI

demonstrates in this brief, this assertion is incorrect, and the District Court's other alleged bases from the intrinsic record that purportedly support its interpretation do not withstand scrutiny under a proper claim construction analysis.

Fundamentally, as this brief establishes, the District Court reversibly erred by disregarding the "heavy presumption that claim terms carry their full ordinary and customary meaning, unless [a party] can show the patentee expressly relinquished claim scope." *Plantronics, Inc. v. Aliph, Inc.*, 724 F.3d 1343, 1350 (Fed. Cir. 2013) (quoting *Epistar Corp. v. Int'l Trade Comm'n*, 566 F.3d 1321, 1334 (Fed. Cir. 2009)).

The core claim phrase in dispute ("to permit selective access") is broad, clear, and easily understood. It uses ordinary words that are in common usage, conveying plain and ordinary meaning without confusion. Although it requires no rewriting, it simply means "to allow choice for entry." The claimed "second opening" in the housing permits *selective* access by the user to the input opening of the media player. Through the second opening, the user can select if and when (and with what type of media storage device) to access the input opening of the media player.

Moreover, when read in the context of the plain language of the rest of the claim, the most reasonable and proper interpretation readily indicates that "selective access to the input opening of the media player" is permitted for "user

positioning of the media storage device within the player” so long as the structure of the housing “defines a second opening and the media player is positioned within the recess such that the input opening of the media player is accessible through the second opening of the housing.” The claim language plainly requires nothing less and nothing more.

Furthermore, the ’393 Patent offers no specific definition of the disputed claim language that differs from its plain and ordinary meaning, and – despite the District Court’s erroneous contrary conclusions – nothing in the specification or prosecution history of the patent evidences a clear disavowal of claim scope to override the claim’s plain and clear language. As TMI demonstrates in this brief, each of the District Court’s stated bases for its claim interpretation vanishes when examined under a proper claim construction analysis.

All of the District Court’s stated reasons for adopting its narrow construction fail to pass muster, strongly indicating that TMI’s proposed broad interpretation was correct all along and is the construction most congruent with the intrinsic record, properly understood.

* * *

The standard of review of the District Court’s grant of summary judgment is *de novo*, drawing all reasonable inferences in TMI’s favor. Under that standard, the District Court’s summary judgment of non-infringement should be reversed if

there are facts, which considered in the light most favorable to TMI, upon which a reasonably jury could find infringement.

Here, once the disputed claim language is properly accorded its plain and ordinary meaning, the evidence of record is more than sufficient to support a jury finding of infringement. *See* Section IV.B.2, *infra*. Indeed, as the District Court observed, “[u]nder Plaintiff’s proposed construction, Plaintiff is entitled to summary judgment of infringement.” A13. Therefore, the District Court’s summary judgment of non-infringement at issue in this appeal was erroneous and should be reversed.

IV. ARGUMENT

A. Standard of Review

This Court reviews a district court’s patent claim construction analysis and conclusions *de novo*. *Lighting Ballast Control LLC v. Philips Elecs. N.A. Corp.*, 744 F.3d 1272, 1276-77 (Fed. Cir. 2014); *Cybor Corp. v. FAS Tech, Inc.*, 138 F.3d 1448, 1454-55 (Fed. Cir. 1998) (en banc). Claim terms generally are construed in accordance with the ordinary and customary meaning they would have to one of ordinary skill in the art in light of the specification and the prosecution history. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-14 (Fed. Cir. 2005) (en banc).

This Court reviews a district court’s grant of summary judgment under the law of the regional circuit. *Charles Mach. Works, Inc. v. Vermeer Mfg. Co.*, 723

F.3d 1376, 1378 (Fed. Cir. 2013). The Ninth Circuit reviews the grant or denial of summary judgment *de novo*. *Leever v. Carson City*, 360 F.3d 1014, 1017 (9th Cir. 2009). All reasonable inferences must be drawn in favor of the non-movant. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986); *SanDisk Corp. v. Kingston Tech. Co., Inc.*, 695 F.3d 1348, 1353 (Fed. Cir. 2012).

B. The Summary Judgment of Non-Infringement of the ‘393 Patent Was Improper and Should Be Reversed.

The District Court’s summary judgment of non-infringement of the ’393 Patent was based on an improperly narrow construction of “the housing is structured to permit selective access to the input opening of the media player ... ” that was effectively limited to *some* of the embodiments disclosed in the specification and improperly incorporated into the broad language of the claim. When the proper construction is applied, it is clear that the summary judgment was improper and should be reversed.

1. The District Court reversibly erred in its construction of “the housing is structured to permit selective access to the input opening of the media player” and the related claim language.

It is well established that words in a claim should be given their ordinary and customary meaning unless the patentee: 1) acts as his own lexicographer by clearly setting forth a definition of the disputed claim term other than its plain and ordinary meaning or 2) makes a clear and unmistakable disclaimer of the full scope

of the term at issue. *See Thorner v Sony Company Entertainment America, LLC*, 669 F.3d 1362, 1365–67 (Fed. Cir. 2012) (It is “not enough for a patentee to simply disclose a single embodiment or use a word in the same manner in all embodiments, *the patentee must ‘clearly express an intent’ to redefine the term*”; “It is likewise not enough that the only embodiments, or all the embodiments contain a particular limitation.”) (emphasis added).

It is undisputable that Claim 1 always included the language “the housing is structured to permit selective access to the input opening of the media player,” continuously from when the original patent application was filed, all the way through the allowance and issuance of the ‘393 patent. It is also undeniable that this phrase was never changed, added, or removed from Claim 1 throughout the entire prosecution of the ‘393 patent.

Moreover, it is also undisputed (and self-evident) that dependent claim 5 of the originally filed patent application was specifically directed to the embodiment shown in Figure 10 of the ‘393 patent. A654; *see also* page 16, *supra*.

It is also incontestable that then-pending claims 1, 2, and 3, of the originally filed patent application (from which then-pending claim 5 depended), must have been at least as broad or broader in scope than then-pending claim 5.

From these irrefutable facts, it follows as a matter of law that the meaning of the claim language “the housing is structured to permit selective access to the input

opening of the media player” must not exclude, and rather must be compatible with, the embodiment shown in Figure 10.

a. The claim language requires adoption of TMI’s proposed interpretation.

i. The claim’s plain and ordinary meaning supports TMI’s proposed interpretation.

Aside from the legal recognition that the phrase “the housing is structured to permit selective access to the input opening of the media player” in Claim 1 must not exclude, and rather must be compatible with, the embodiment shown in Figures 10, none of the words in the claim require construction by the Court.

Claim 1 uses ordinary English words whose meaning is well known to all, and nothing in the intrinsic record indicates that the meaning of the individual words in the claim (or the claim language in its entirety or even considered phrase-by-phrase or limitation-by-limitation) should be altered from its plain and ordinary meaning. Moreover, nothing indicates that any of the words in the claim have any specialized meaning in the field of “vehicles,” which is the Field of the Invention. A52, at col. 1:23. Thus, there is no reason to rely on any extrinsic evidence or expert testimony as to the meaning of any of the words in the claim, and doing so would be disfavored.⁹

⁹ *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005) (en banc) (discussing sources of evidence in claim construction, and stating “while extrinsic

Specifically, as the District Court recognized (A14–A15), all words in the phrase “to permit selective access,” are ordinary words that are taught in grade school, and are in common usage, conveying plain and ordinary meaning without confusion. “To permit,” of course, simply means “to allow.” A776. “Access” (as a noun, which is how it is being used) has many meanings and connotations, but the simplest and most applicable in the present context is “the condition of allowing entry.” A779. “Selective” (an adjective) simply refers to choice. A783. Hence, the ordinary meaning of “selective” applies whenever a user has a choice, or an action is optional and not mandatory. So, if the simple phrase “to permit selective access” is to be changed to something else by the Court (and TMI contends that there is no good reason to do this) it could acceptably be changed to: “to allow choice for entry.”

Still, any such substitution of words in this instance would not be helpful. Here, an alternative phrase may be less clear than the actual claim language. Thus, the clear and simple phrase “to permit selective access” should be left alone and not reworded.

The District Court found that the plain meaning definitions of the words in the disputed phrase “are not particularly helpful in assessing the parties’ proposed

evidence ‘can shed useful light on the relevant art,’ we have explained that it is ‘less significant than the intrinsic record in determining ‘the legally operative meaning of claim language’”) (citing cases).

claim constructions.” A15. Unfortunately, the District Court missed the primary point, which is that the plain meaning of the disputed words and phrases is ***broad*** and should be accorded its full range of breadth and meaning in the absence of disclaimer or redefinition in the intrinsic record – which does not exist in this case.

ii. TMI’s interpretation does not read “selective” out of the claim.

The District Court adopted Rosen incorrect argument that TMI’s “construction of ‘selective access’ renders the word ‘selective’ redundant.” A15. Specifically, the District Court concluded that “[i]f ‘to permit selective access’ referred to the user’s choice to either access the device or not, the word ‘selective’ could be omitted entirely without doing any violence to the limitation’s meaning,” because “by definition, one with access to an object may choose whether or not to make use of it.” *Id.* The District Court’s analysis is logically and legally erroneous, because the District Court did not read the plain language of the claim correctly and in accordance with its broad plain and ordinary meaning.

Contrary to the District Court’s finding, TMI gives the word “selective” its ordinary and logical meaning in the context of the rest of Claim 1, and in the context of the supporting patent specification. As is clear from the context within Claim 1, and acknowledged by Rosen’s technical expert, it is the housing that “permits” and the user who “selects” access. A60, at col. 18:10-12; A1527, at

136:2-19. As Rosen's expert also necessarily admitted, the housing obviously has no brain or volition to choose when and if to access, and so the housing does not "select." A1526, at 134:6-15; A1538, at 185:9-17. The claim language plainly indicates that the housing is merely structured to "permit," and it is compatible with the claim language for the housing to "permit" continuously, 24 hours per day, seven days per week.

It is clear and logical that the word "selective" in the claim merely signals that the access is by the user. It is the user who has the intelligence and volition to choose (*i.e.*, to select) if and when to access the input opening of the media player through the second opening. Indeed, the context of the claim language itself ("the housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player") refers to the user positioning the media storage device. By contrast, a hole in the housing that the user does not access, may be accessed by something else (*e.g.*, a bolt or rivet), but such access would not be "selective access" because, unlike the user, a bolt or rivet lacks the intelligence to choose or select.

The District Court's interpretation erroneously adopted Rosen's proposal, which illogically assigns the "selecting" to the housing rather than to the user. Indeed, before Rosen's expert disavowed Rosen's position (A1527, at 136:2-19; A1526, at 134:6-15; A1538, at 185:9-17) Rosen had attempted to illogically

personify the housing, as if the housing could select non-access for the user.

Rosen's original approach was to attempt to confuse the housing's function (to permit) with the user's function (to select) (A1528, at 144:16-24), by adventuring that: "This part of the claim term requires that sometimes the user is not permitted to, *i.e.*, cannot, place the media storage device within the player, which is the only meaning consistent with 'selective access.'" A845, at ¶ 42. Hence, according to Rosen's proposed construction, an inanimate and mindless piece of plastic makes the choices and selections, rather than the user. That would be "selective permitting," not "to permit selective access," and so is not compatible with the asserted claim. Even Rosen's expert admitted this when faced with the question point-blank (A1525, at 131:7-12), but the District Court failed to recognize this critical point.

A far more logical interpretation of the claim language – and the interpretation that comports with the applicable rules of claim construction – is that "the housing is structured to permit" the user to choose whether and when to access the input opening of the media player. Accordingly, the logical and ordinary significance of the word "selective" in the context of the asserted claim would be that the word "selective" merely specifies that the access is by the user. ***Hence, TMI's position does not read "selective" out of the asserted claim; rather the word "selective" is understood to distinguish from the non-selective type of***

access provided by a bolt hole or other such opening that may be used during assembly, but which the user does not choose to access during normal operation of the accused product.

Thus, TMI does not read “selective” out of the claim; rather TMI understands that the ordinary meaning of the word “selective” signals that the input opening is accessible to the user. After all, it is only the user who has the intelligence and volition to choose (*i.e.*, to select) if and when to access. Also, the immediate context of the claim language itself expressly refers to the “user positioning” the media storage device. Hence, TMI’s understanding follows from the ordinary meaning of the longer phrase.

iii. Context within the asserted claim itself supports TMI’s interpretation.

Because the District Court erroneously concluded that TMI’s construction renders “selective” redundant, its analysis of the rest of the language of Claim 1 was flawed from the outset (A15–A16). The District Court failed to recognize that the context of the disputed phrase within Claim 1 expressly supports that the second opening of the housing is the structure that enables the housing to “permit selective access to the input opening of the media player.” For example, considering the longer phrase “the housing is structured to permit selective access to the input opening of the media player” in Claim 1, plainly it is the user who

must make the choice or selected action; the housing merely “permits” that choice to be made by the user. This is clear from the context of Claim 1 itself, which describes the permitted user action (*i.e.*, to be selected or non-selected by the user) as “to permit user positioning of the media storage device within the player.”¹⁰

Moreover, Claim 1 itself expressly points to the claimed “second opening” as being the structural feature of the housing that permits access, as follows: “the housing defines a second opening and the media player is positioned within the recess such that the input opening of the media player is accessible through the second opening of the housing.” A60, at col. 18:18-21 (emphasis added).

Claim 1 (as originally filed) included the entire phrase “the housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player,” which was never amended or distinguished during prosecution.

Therefore, the context of the disputed phrase within Claim 1 expressly supports that the second opening of the housing can “permit selective access to the input opening of the media player.”

¹⁰ A60, at col. 18:11-12 (emphasis added). *See Phillips*, 415 F.3d at 1314 (“Quite apart from the written description and the prosecution history, the claims themselves provide substantial guidance as to the meaning of particular claim terms.”); *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms”).

iv. Claim differentiation supports TMI's position.

The District Court also failed to recognize that common principles of claim differentiation support TMI's proposed interpretation.

Rosen had argued that "to permit selective access" requires motion (*e.g.*, pivoting) of the housing, but that cannot be correct because that phrase always appeared in Claim 1 throughout the patent prosecution, and was never changed from the time of original filing, through allowance. Hence, the phrase "to permit selective access" always applied to Claim 1, even originally when it generically covered both pivoting and non-pivoting embodiments of the housing. Therefore, the phrase "to permit selective access" cannot be the phrase that operates to limit any claim to only cover pivoting embodiments.

On the contrary, it is obviously the phrase "pivotably attached" (a limitation that was expressly removed from asserted Claim 1 during prosecution) that operates to limit a claim to cover only moving/pivoting embodiments. This is abundantly clear, considering the express use of the word "pivotably" in that phrase.

It is further supported by comparison of asserted Claim 1 with unasserted claim 4. This further support stems from the doctrine of claim differentiation, which is "based on the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings

and scope.” *Karlin Tech. Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971-72 (Fed. Cir. 1999).

Here, although unasserted claim 4 includes the phrase “to permit selective access,” still the applicant felt the need to include “pivotably attached” to claim 4, to limit claim 4 to cover *only* the pivoting embodiments. Asserted Claim 1, by contrast, plainly does *not* include “pivotably attached,” and so is not limited to covering only the pivoting embodiments. Instead, asserted Claim 1 includes the “second opening” structural limitation, which expressly directs it to include the non-pivoting embodiments of Figures 9A-10. Plainly each of Figures 9A-10 of the ’393 patent depicts a housing having a fixed second opening that does not pivot.

Rosen also suggested that the Court disregard the “pivotably attached” limitation that appears by contrast in issued claim 4, and that was expressly removed from asserted Claim 1 during prosecution. A737. Yet, hypocritically, Rosen’s bloated proposed claim construction includes language (about moving between deployed and retracted orientations) that is supported by *only* the pivoting embodiments of Figs. 11A-12B. Although Rosen’s lengthy proposed construction (adopted in large part by the District Court) shies away from “pivoting” and instead uses “moving,” on the whole it improperly attempts to import limitations of the pivoting embodiments of Figs. 11A-12B into Claim 1.

b. The '393 Patent specification confirms that TMI's position is correct.

Although the District Court erroneously concluded that “ambiguities in the specification” (A16) support its narrow reading of Claim 1, analysis of the '393 Patent specification confirms that TMI's broad interpretation is correct. According to the District Court's incorrect analysis, the applicants necessarily *never* intended to cover the non-pivoting embodiments shown in Figures 9A-10 with Claim 1 (or with *any* of the claims in the patent, for that matter). This conclusion defies all logic and common sense, and more importantly, flatly contradicts the intrinsic record.

i. It is improper in this case to import a pivoting limitation from a subset of the embodiments disclosed in the specification.

The District Court erroneously accepted Rosen's invitation to import a “moving” limitation from a subset of embodiments disclosed in the specification of the '393 patent, into asserted Claim 1.

As a threshold matter, of course, it is generally improper to import limitations from an example embodiment described in the patent specification, into the claims.¹¹

¹¹ *Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1347-48 (Fed. Cir. 2009) (“The patentee is entitled to the full scope of his claims, and we will not

Second, it is especially improper in this case to read into Claim 1 a pivoting limitation from the exemplary embodiments of Figures 11A-12B, because doing so would exclude the *non*-pivoting embodiments of Figures 9A-10, which are also disclosed in the same patent specification and which are expressly included in the scope of Claim 1 by virtue of the “second opening” structural limitation of that claim.¹²

ii. Asserted Claim 1 covers Fig. 10 despite Rosen’s self-contradictions about the “housing.”

All of Rosen’s arguments that Claim 1 “does not cover any embodiment of Figs. 9A-10” result in a self-contradiction. First, Rosen argued that “neither Figure 10 nor the patent’s descriptions related to Figure 10 describe a housing at all.” However, that contradicts statements by both Rosen¹³ and its expert.¹⁴ Moreover,

limit him to his preferred embodiment or import a limitation from the specification into the claims.”) (citing *Phillips*, 415 F.3d at 1323).

¹² *Vitronics Corp. v. Conceptoronic*, 90 F.3d 1576, 1583-84 (Fed. Cir. 1996) (“Such an interpretation is rarely, if ever, correct and would require highly persuasive evidentiary support, which is wholly absent in this case.”); *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996) (“We share the district court’s view that it is unlikely that an inventor would define the invention in a way that excluded the preferred embodiment, or that persons of skill in this field would read the specification in such a way.”).

¹³ Rosen conceded that original claims 3-5 (which require a “housing” due to dependence from original Claim 1) are directed to Figures 9A-10. A810–A811, at 11:23–12:5. Rosen’s expert agreed. *See* A853, at ¶ 59. These arguments logically require that implementations of the arrangements depicted in Figures 9A-10 include a “housing.”

Rosen’s otherwise-incorrect argument that the withdrawal of original claims 3-5 disavowed the subject matter of Fig. 10 legally *requires* that the embodiment of Fig. 10 must have a housing.¹⁵

Next, Rosen argued that the embodiments of Figs. 9A-10 lack a housing that is “structured to permit selective access to the input opening of the media player” or that defines a “recess having a first opening that receives both the display and the media player.” However, Rosen implicitly admitted that the embodiments of Figs. 9A-10 must have included both of those claim requirements.¹⁶ This is because they were both present, verbatim, in *Claim 1 as originally filed* – which covered the embodiments of Figs. 9A-10 at least due to the dependency of original claims 3-5 (which Rosen admitted were directed to the embodiments of Figs. 9A-10). *See* A810–A811, at 11:23–12:5.

¹⁴ Rosen’s own expert admitted that one of ordinary skill in the art would conclude that the embodiment shown in Fig. 9A of the asserted patent includes a housing. *See* A1521, at 114:5-10; A1522, at 117:13-23. Rosen did not distinguish between Fig. 9A and Fig. 10 in this regard.

¹⁵ Original claims 3-5 must have required a housing because they depended from original Claim 1 (which required a “housing”). *See* page 16, *supra*. Although Rosen incorrectly argued that the withdrawal of claims 3-5 caused any disavowal, the withdrawal certainly could not have disavowed what Rosen alleged the claims never covered to begin with. Hence, Rosen’s erroneous disavowal argument *requires* the embodiments of Figs. 9A-10 to have included the “housing” as claimed.

¹⁶ TMI not only correctly pointed out that the claimed housing features legally *must* have been included in the embodiments of Figs. 9A-10, but TMI also pointed out specifically how, where, and why. *See* A1468–A1470, at 15:12 - 17:4.

iii. It is beyond reasonable dispute that Figures 9A-10 include a “housing.”

A simple comparison of Figures 9A and 9C visually confirms that the headrest of Figure 9C includes a housing. After all, the headrest of Figure 9C must be capable of housing a media player and a display, because in Figure 9A the headrest is shown housing both a media player 308 and a display 306. A38. Note that since the word “housing” was in the claims as originally filed and was not added by amendment or argued during prosecution, so the word housing is entitled to its broadest ordinary meaning: “something that covers or protects.”¹⁷

Even Rosen’s own expert understood “housing” to have a broad ordinary meaning: “a type of structure, container” that is not necessarily rigid. A1540, at 195:10-13; A1541, at 196:4-5. Nothing in the patent or prosecution history suggests or requires that the headrest and housing must be an assembly of previously separate and non-integral subcomponents. Rather the required “housing” might be integral with, or have material continuity with, other features of the headrest – for example as a single monolithic component. By analogy, the head and claw features of a hammer are distinguishable features of a single integral

¹⁷ A1483 (Internet dictionary definition of “housing” from www.merriam-webster.com/dictionary/housing). *See also 3M Innovative Props. v. Tredegar Corp.*, 725 F.3d 1315, 1322, 1324-26 (Fed. Cir. 2013) (proper construction of “continuous contact” is the plain and ordinary meaning of that phrase, and should not be limited to “full surface contact”).

and monolithic component, though they could be distinguished and separately required by a patent claim. Likewise, the housing portion of the headrest shown in Figure 9C (A40) may optionally be integral or monolithic with the rest of the headrest (which may have other integral features or portions such as an outer surface of the seat back, a head restraint portion, etc., in addition to the housing portion).

Moreover, the originally-filed claims 3-5, together with the claims from which they depend, indisputably require a “housing.” The parties even agree that these claims cover Figures 9A-10. A810–A811, at 11:23-12:5 (“[C]laims 3-5 are specific to the embodiment of Figs. 3-5....”).

Hence, the parties actually agree that Figures 9A-10 must include a “housing.” Rosen’s own confusion and self-contradiction on this point does not evidence any “ambiguities in the specification,” despite the contrary conclusion by the District Court (A16). Indeed, Rosen’s own technical expert admitted that one of ordinary skill in the art would conclude that the embodiment shown in Fig. 9A of the asserted patent includes a housing. (A1521, at 114:5-10; A1522, at 117:13-23).

iv. The housing of Figure 10 includes a recess 326 that can receive both the media player 308 and the display 306.

Figure 10 (A41) shows that both the media player 308 and the display 306 are housed. Rosen's expert, Dr. Parnell, originally stated that both are not received by the recess 326 of Figure 9C (A831, at ¶ 26), but that assertion was based on unsupported speculation. Dr. Parnell later admitted that the patent figures are not necessarily drawn to scale (A1518, at 93:3-7), and the size of the media player 308 is not specified or limited. Hence, it is impossible to rule out, from the appearance of Figure 9C alone, that the recess 326 receives the media player as well as the display.

Moreover, Rosen implicitly admitted that the recess 326 receives both the media player 308 and the display 306, when Rosen expressly admitted that originally-filed claims 3-5 covered Figures 9A-10. A810–A811, at 11:23-12:5 (“[C]laims 3-5 are specific to the embodiment of Figs. 3-5...”). That is because Claim 1, from which originally-filed claims 3-5 depended, has always required that the first opening of the recess of the housing “receives both the display and the media player recess receive the display and the media player.” A654.

c. Nothing in the prosecution history of the '393 Patent undermines TMI's position.

Rosen had argued that the scope of independent Claim 1 should be narrowed, by arguing that a subset of dependent claims (*i.e.*, originally filed claims 3-5) was unelected during prosecution. A810–A813. As to this argument, the District Court concluded that “the evidence in the prosecution history is inconclusive. A16. Nevertheless, the District Court decided that “[t]he prosecution history does, however, lend strong support to Defendant’s interpretation” because, according to the District Court, “the examiner understood ‘structured to permit selective access’ to mean capable of being made accessible or inaccessible by, for instance, pivoting in the recess.” *Id.* As conclusively established herein, both the District Court’s and Rosen’s interpretation of the file history are demonstrably incorrect. Analyzed correctly, the prosecution history plainly supports TMI’s proposed claim interpretation.

i. The prosecution history of Claim 1 plainly supports an interpretation of Claim 1 that includes Figure 10 and is not limited to pivoting embodiments.

The entire prosecution history of the '393 patent (already discussed extensively in Section II.E, *supra*) provides a final confirmation that Claim 1 must be construed so as to encompass the non-pivoting embodiments shown in Figures 9A-10. Just as in a recent Federal Circuit case declining to construe a term

narrowly, “here, the prosecution history eliminates any reasonable basis for thinking that the patent has adopted a meaning different from the clear ordinary one.” *Ancora Techs. v. Apple, Inc.*, 744 F.3d 732, 738 (Fed. Cir. 2014). “[A]n ordinarily skilled artisan must consult the prosecution history to confirm the proper understanding of a claim term's meaning, especially if other aspects of the inquiry raise questions.” *See also Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1366 (Fed. Cir. 2001) (“[T]he prosecution history . . . should always be consulted to construe the language of the claims.”); *Texas Instruments Inc. v. U.S. Int’l Trade Comm’n*, 871 F.2d 1054, 1063 (Fed. Cir. 1989) (“The public . . . must look to both the patent specification and the prosecution history, especially where there is doubt concerning the scope of the claims.”).

ii. The purpose and effect of a restriction/election is nonsubstantive.

As a threshold matter, the purpose of a restriction requirement is not to remove from the patent the ability to cover more than the elected embodiments.¹⁸ Despite Rosen’s exaggerations, when an examiner withdraws unelected claims,

¹⁸ “Two or more independent and distinct inventions may not be claimed in one national application, except that *more than one species of an invention*, not to exceed a reasonable number, may be specifically claimed in different claims in one national application, *provided the application also includes an allowable claim generic to all the claimed species and all the claims to species in excess of one are written in dependent form* (§ 1.75) or otherwise include all the limitations of the generic claim.” *See* 37 C.F.R. §1.141(a) (emphasis added).

they have not been “rejected” by the examiner.¹⁹ On the contrary, a restriction requirement is merely a procedural²⁰ device to reduce the burden on the examiner of having to examine differences between the unelected embodiments and the prior art.²¹ The additional limitations presented by the unelected claims are typically

¹⁹ *In re Hengehold*, 440 F.2d 1395, 1402-03 (CCPA 1971) (“Congress ... decided not to regard the procedure involved in matters of ‘division’ or ‘restriction’ as a ‘rejection.’ ... the board correctly determined that the examiner's ‘requirement’ here could not be considered an instance of claims being ‘rejected’ at all ...”). *See also*, 35 U.S.C. § 121 (“The validity of a patent shall not be questioned for failure of the Director to require the application to be restricted to one invention.”).

²⁰ “Restriction requirements are like other PTO ‘requirements’ that are ‘matters of a discretionary, procedural or nonsubstantive nature.’” *Bristol-Myers Squib v. Pharmachemie*, 361 F.3d 1343, 1352 (Fed. Cir. 2004) (Newman, J., dissenting) (citing *In re Harnisch*, 631 F.2d 716, 721 (CCPA 1980) (“In the PTO, patent applications are examined for compliance with the statutory provisions of Title 35, United States Code, as set forth in sections 100, 101, 102, 103, and 112. These are considered to be examinations ‘on the merits.’ There are also procedural questions arising under section 121 and related PTO rules concerned with ‘restriction practice.’”).

²¹ “Early in the evolution of patent examination the Patent Office adopted the discretionary ‘restriction’ practice, to simplify the search and examination of complex inventions. In electing to require ‘restriction’ the patent examiner requires the applicant to select a specified aspect of the claimed subject matter, the examiner having first divided the subject matter into groups of claims based on classification for search purposes. The applicant then selects the aspect to be examined, and usually also ‘traverses’ the requirement, a formality grounded in administrative protocols. Examination then proceeds as to the selected subject matter. The non-selected aspects are then removed from consideration in that case; they may be rejoined or they *may* be moved into one or more divisional applications for examination.” *Bristol-Myers*, 361 F.3d at 1351 (Newman, J., dissenting).

withdrawn, and thereby become at least temporarily unavailable to the applicant for the purpose of distinguishing the prior art.

However, the scope of a remaining independent claim is not affected by withdrawal or cancelation of unelected dependent claims,²² absent applicant remarks expressing a clear and unmistakable disavowal of claim scope²³ – regardless of whether the withdrawal had been motivated by a restriction requirement. Hence, unelected and unexamined species and embodiments may still be covered by a broader claim (that is not withdrawn because it also covers at least one elected embodiment).²⁴ Such a broader claim may ultimately be allowed, without reliance on the additional limitations of the narrower unelected claims to distinguish the prior art, and with its scope unchanged by the election/restriction.

²² See *Intamin Ltd. v. Magnetar Techs., Corp.*, 483 F.3d 1328, 1335 (Fed. Cir. 2007) (“An independent claim impliedly embraces more subject matter than its narrower dependent claim.”).

²³ *Uship Intellectual Properties, LLC v. United States*, 714 F.3d 1311, 1315 (Fed. Cir. 2013) (finding prosecution disclaimer by *applicant remarks* made while successfully traversing a restriction requirement).

²⁴ See 37 C.F.R. § 1.141(a).

iii. The election in this case did not narrow claim scope.

In the case of the '393 Patent, the USPTO required TMI to elect a subgroup to “be restricted *if no generic claim is finally held to be allowable*.”²⁵ The applicants’ elected subgroup 1C (Figures 11A-12B) for examination.²⁶ As explained in the previous section, the legal effect of that election was merely to procedurally relieve the examiner from the burden of comparing the additional limitations presented by original dependent claims 3-5 against the prior art. However, the indisputably broader original claims 1 and 2 remained under examination and continued to broadly include other subgroups²⁷ (including at least the unelected embodiments of Figs. 9A-10).²⁸

²⁵ A690. Although the examiner also commented that no claims then *appeared to be* generic, the examiner left that possibility open in a later paragraph that began: “Upon the allowance of a generic claim” A691.

²⁶ A695 (“In response to the Restriction Requirement mailed May 10, 2007, Applicant hereby elects Group I (Claims 1-29 and 34-41), subgroup 1C (Figures 11A-12B) for prosecution in the present application.”).

²⁷ Rosen disputed this by trumpeting an example where the applicants focused on the elected subgroup (as *examples* of figures supporting their position) while citing to a provisional patent application. A1618. However, such focus by applicants was natural then, considering which subgroup was then under examination (*i.e.*, after the election), but was nothing like a disavowal or any admission that the unelected subgroups were not covered by the broadest claims.

²⁸ Hence, the examiner’s withdrawal of claims 3-5 was conditioned upon “there being no *allowable* generic or linking claim.” A705. In any case, withdrawal of original dependent claims 3-5 plainly did not *add* limitations to narrow the scope of Claim 1.

Rosen's attempt to narrow the scope of independent Claim 1, by arguing that a subset of dependent claims was unelected during prosecution, is similar to one that was rejected by another district court in the Ninth Circuit (a ruling that was affirmed by this Court). In *Fortunet, Inc. v. Melange Computer Servs.*, a defendant argued that "the patentee restricted himself to the specific embodiment in Figures 9-12," that "claim 1 did not remain generic," and that "because the '784 is restricted to the embodiment in Figures 9-12, the number of elements drawn to determine the winner must be 'fixed,' that is, a certain number must be drawn each time."²⁹ The plaintiff replied that "although the patentee restricted his application to the embodiment in Figures 9-12, claim 1 remained generic throughout prosecution and allowance." *Id.* at 1086.

The court held that Claim 1 remained generic, and that the restriction and election did not limit it to cover only the elected embodiment of Figs. 9-12. *Id.* at 1087. The court based its holding on several factors that are directly analogous to the present dispute:

²⁹ 412 F. Supp. 2d 1071, 1084-87 (D. Nev. 2005) (*aff'd* 294 Fed. Appx. 609, 2008 U.S. App. LEXIS 19392 (Fed. Cir. 2008)).

1. The relationship between the independent Claim 1 and the dependent claim(s) directed to the elected embodiment;³⁰
2. The fact that Claim 1 did not expressly include the limitation presented by the dependent claim(s) directed to the elected embodiment;³¹
- and
3. Differentiation based on the language used in the two claims.³²

The same outcome is appropriate here, for the same reasons.

i. Applicants did not need to “reinstate” canceled claims 3-5.

Rosen incorrectly argued that because canceled claims 3-5 were not “reinstated,” Claim 1 could not have been generic to cover the embodiments of Figs. 9A-10. A1619 at 9:15-20. However, by the time independent Claim 1 was allowed, dependent claims 3-5 had already been canceled and so could not be rejoined. A771. But rejoinder was unnecessary because the broader scope of

³⁰ In *Fortunet*, original dependent claims 2-4 were directed to the elected embodiment (Figs. 9-12); likewise here, original dependent claims 6-10 were directed to the elected embodiment (Figs. 11A-12B).

³¹ In *Fortunet*, “set number” was required by dependent claim 2; likewise here, “pivotably attached” was required by original dependent claim 6.

³² In *Fortunet*, claim 2 (which included the “set number” limitation) was differentiated from independent Claim 1 (which did not); likewise here, issued claim 4 (which includes the “pivotably attached” limitation) can be differentiated from independent Claim 1 (which does not).

independent Claim 1 had been allowed. Moreover, under the rules, rejoinder was then optional and not mandatory.³³

ii. The Examiner’s comments regarding the Vitito references do not limit the scope of Claim 1.

Based on the Examiner’s characterization of the Vitito references (*see* Section II.E.4, *supra*), the District Court concluded that “[t]he prosecution history does, however, lend strong support to Defendant’s interpretation.” A16. In particular, according to the District Court, “the examiner understood ‘structured to permit selective access’ to mean capable of being made accessible or inaccessible by, for instance, pivoting in the recess.” *Id.*

However, contrary to the District Court’s analysis, the Examiner never asserted that the pivoting mechanism in the cited Vitito reference was the **only** solution that could provide a “housing structured to permit selective access.” More importantly, the applicants never agreed with or commented on the Examiner’s

³³ The Examiner correctly characterized the rejoinder process as permissive: “Upon the allowance of a generic claim, applicant ***will be entitled to*** consideration of claims to ***additional species which depend from*** or otherwise require all the limitations of ***an allowable generic claim*** as provided by 37 CFR 1.141.” A691 (emphasis added). *See also*, CHISUM ON PATENTS, § 12.03[2][E] (“Where an application contains both distinct inventions and a linking claim, restriction may nevertheless be required in the first instance. The linking claim is then examined on the merits along with the elected claims. If the linking claim is allowed, then rejoinder of the divided inventions must be **permitted.**”) (emphasis added).

argument that Vitito disclosed an example of such a housing structure, much less that it disclosed the *only and definitional embodiment* of such a structure.

Thus, demonstrably, the District Court disregarded the basic legal principle that it is the applicant, not the examiner, who must give up or disclaim subject matter that would otherwise fall within the scope of the claims, and that an applicant's silence regarding statements made by the examiner during prosecution cannot amount to a clear and unmistakable disavowal of claim scope. *See Sorensen v. Int'l Trade Comm'n*, 427 F.3d 1375, 1379 (Fed. Cir. 2005); *Salazar v. Procter & Gamble Col.*, 414 F.3d 1342, 1345 (Fed. Cir. 2005).³⁴

2. Under the Proper Construction of Claim 1, the Summary Judgment of Non-Infringement Was Improper.

The District Court applied Claim 1 as it had narrowly construed it to the accused products, examined physical samples of the accused devices *in camera*, and concluded that “[t]he accused products’ housing sits within the recess of the headrest, and cannot be manipulated to expose the input opening, which is always accessible from the top of the headrest.” A18. Based on its construction of the asserted claim and its factual findings regarding the accused products based on this *in camera* examination, the District Court granted Rosen’s motion for summary judgment of non-infringement. *Id.*

³⁴ Underscoring the weakness and insignificance of this argument, it should be noted that Rosen did not even raise it in its briefing at the district court level.

However, as the District Court observed, “[u]nder Plaintiff’s proposed construction, Plaintiff is entitled to summary judgment of infringement.” A13. For completeness, TMI hereby points out exactly where the evidence of infringement exists under its proposed interpretation of Claim 1.

a. The Rosen AV7900 product literally infringes all elements of Claim 1 of the ‘393 patent.

As noted earlier (*see* Section II.F, *supra*) the accused Rosen products are not materially different from the claimed embodiment shown in Figure 10 of the ‘393 patent.³⁵ The likeness is not a coincidence. Rosen intentionally designed the AV7900 product to be like Figure 10 of the ‘393 patent.³⁶

The parties agreed that “...no factual dispute exists as to the structure or operation of Rosen’s products,” and that “the only dispute is a legal issue as to the scope of the patent claim, which is for this Court to decide.”³⁷ Hence, both parties accept that the Court’s infringement determination will follow the determination of whether asserted Claim 1 covers Figure 10 of the ‘393 patent.

³⁵ Rosen admitted that Rosen’s primary non-infringement rationale for the AV7900 product ***applies in the same way to Fig. 10*** of the asserted ‘393 patent. *See* A1440–A1441, at 83:6–84:21. Rosen also expressly admitted that “Rosen’s fixed-position monitor and player accessible through the top of the headrest ***have exactly the features*** that were in claims that were eliminated from the ‘393 patent’s application and then included but abandoned in a subsequent divisional patent application.” *See* A801, at 2:24-27.

³⁶ *See* A800, at 1:1-4.

³⁷ A801, at 2:4-6.

Of course, the proper comparison to establish infringement of a product is not a comparison with any embodiment of the specification, but rather a comparison with the asserted claim.

In this case, the evidence of infringement is clear, complete, and indisputable. It comes from the corporate representative designated under Fed. R. Civ. P 30(b)(6) to speak for Rosen, Mr. Curt Kucera, and the documents and photos of relevant aspects of the accused product that he authenticated. Every single limitation was admitted by Mr. Kucera, under TMI's proposed claim construction.³⁸

³⁸ Mr. Kucera's admissions can be found in the following portions of the Kucera Deposition transcript, cited and grouped here by the elements of asserted Claim 1 (according to the claim element identifications defined in footnote 2, *supra*:

- 1(a): A1415, at 15:15-23; A1416, at 16:2-14; A1420–A1421, at 20:23-21:3; A1433–A1434, at 38:16-39:6; A1435, at 40:3-6.
- 1(b): A1434–A1435, at 39:22-40:6; A1443, at 85:9-12.
- 1(c): A1420–A1421, at 20:23-21:3; A1435, at 40:3-6.
- 1(d): A1420–A1421, at 20:23-21:3, A1432, at 37:6-19; A1436, at 43:11-19.
- 1(e): A1415, at 15:15-23, A1416–A1417, at 16:25-17:13; A1418, at 18:11-20; A1422, at 23:5-15; A1425–A1427, at 28:18-30:22; A1433, at 38:16-23; A1436–A1437, at 43:20-44:5; A1437–A1438, at 44:20-45:2.
- 1(f): A1432, at 37:6-19; A1434, at 39:4-12.
- 1(g): A1427, at 30:5-19; A1430–A1431, at 35:22-36:5; A1434, at 39:17-23.
- 1(h): A1427, at 30:5-19, A1431, at 36:1-5; A1434, at 39:17-23; A1439–A1440, at 46:19-47:12.
- 1(i): A1420–A1421, at 20:23-21:3, A1427, at 30:5-11; A1431, at 36:1-5; A1436, at 43:11-19.

For ease of reference, TMI provided a detailed chart comparing every element of asserted Claim 1 of the ‘393 patent with indisputable factual evidence about the Rosen AV7900 product. A1335 – A1371.³⁹ This chart shows simply and graphically that the Rosen AV7900 product literally infringes each and every element of the asserted Claim 1 of the ‘393 patent. The chart also provides more than sufficient indisputable factual evidence to preclude any reasonable factual dispute about the literal infringement of every claim element under TMI’s claim construction.

For example, the AV7900 clearly infringes the ordinary meaning – or any proper construction – of the Claim 1 requirement that “the housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player.” That is evident because the user plainly has the option or choice whether and when to insert and/or what media storage device to insert into the second opening of the housing in the

1(j): A1418–A1420, at 18:21-20:11; A1423–A1424, at 24:10-25:13; A1439, at 46:6-12; A1449, at 105:8-12.

1(k): A1427–A1428, at 30:23-:31:10; A1428, at 31:18-25; A1429, at 32:1-6; A1435, at 40:2-6; A1439–A1440, at 46:19-47:12; A1445–A1446, at 97:4-98:6.

1(l): A1439, at 46:6-14.

1(m): A1427, at 30:5-19; A1429, at 32:11-16; A1434, at 39:17-23.

1(n): A1418–A1420, at 18:21-20:11; A1438–A1439, at 45:16-46:14.

³⁹ It simply contains all of the evidence listed in note 38, *supra*, arranged in a claim chart form, on a limitation-by-limitation basis, with authenticated photographs and other documents corresponding to the accused products.

AV7900. Moreover, Rosen's corporate designee under Fed. R. Civ. P. 30(b)(6), Curt Kucera, repeatedly admitted under oath that the user of the Rosen AV7900 has an option or choice whether to insert a media storage device (and/or what media storage device to insert) into the AV7900 media player through a second opening of its housing.⁴⁰

Hence, there is no reasonable factual dispute about the literal infringement by the Rosen AV7900 product of Claim 1 of the '393 patent under TMI's proposed interpretation of the claim.

b. Rosen's technical representative, Mr. Kucera, admitted infringement under TMI's proposed interpretation.

Rosen debated whether TMI correctly asserted that "[e]very single limitation was admitted by Mr. Kucera, under TMI's proposed claim construction" (A1324, at 13:21-22) on the semantic grounds that TMI's deposition questions sometimes used roots of the word "choose" instead of roots of the word "select." A1622-A1623, at 12:15-13:11. But there is no difference under TMI's construction, since the ordinary meaning of "select" is synonymous with the ordinary meaning of "choose."⁴¹

⁴⁰ A1418-A1420, at 18:21-20:11; A1423-A1424, at 24:10-25:13; A1439, at 46:6-12; A1444, at 87:3-15; A1449, at 105:8-12.

⁴¹ TMI sometimes also questioned Mr. Kucera using roots of the word "select," when TMI sought answers pertaining to the application of Rosen's

c. The Rosen CS9000 product variant also literally infringes all elements of Claim 1 of the ‘393 patent.

With regards to infringement of Claim 1 of the ‘393 patent, the Rosen CS9000 product is materially the same as the Rosen AV7900 product. Either both infringe, or neither infringes.

The corporate representative designated under Fed. R. Civ. P. 30(b)(6) to speak for Rosen, Curt Kucera, stated under oath that “the CS9000 is simply a re-branding of the same AV product that we have been talking about [AV7900], so I directed my staff to create product labeling to change the brand.”⁴²

Mr. Kucera also stated under oath as Rosen’s corporate designee under Fed R. Civ. P. 30(b)(6) that the only differences between the Rosen CS9000 product and the AV7900 product are: “The brand name, associated documentation, which has branding on it and the elimination of an internal game module in the CS9000.”⁴³ It is undisputed that none of the foregoing differences determines whether or not the product infringes Claim 1 of the ‘393 patent. Therefore, the

construction to the accused products (rather than ordinary meaning). *See* A1441, at 83:6-8 & 83:16-18; A1442, at 84:7-9 & 84:17-20.

⁴² A1447, at 101:17-22.

⁴³ *Id.* at 102:5-10.

determination of infringement for the Rosen CS9000 product follows and is redundant with that for the Rosen AV7900 product.⁴⁴

V. CONCLUSION

As demonstrated herein, the District Court reversibly erred in granting the summary judgment at issue in this appeal. TMI therefore respectfully requests that this Court reverse the District Court's summary judgment of non-infringement of the '393 Patent (and the erroneous claim construction upon which that judgment was based).

September 2, 2014

Respectfully submitted,

/s/ Reynaldo C. Barceló
Reynaldo C. Barceló
Counsel of Record

BARCELÓ, HARRISON &
WALKER, LLP
2901 West Coast Hwy, Suite 200
Newport Beach, CA 92663

(949) 340-9736

*Counsel for Plaintiff-Appellant, TMI
Products, Inc.*

⁴⁴ The specifically accused Rosen systems and components were listed in TMI's revised Proposed Order, accompanying its Reply on its summary judgment motion of infringement. A2226–A2227. The accused components have no substantial use other than with an accused system. A1533, at 158:6-13; A1534, at 159:2-5.

Certificate of Service

I hereby certify that on September 3, 2014, I caused to be filed electronically the foregoing with the Clerk of the Court for the United States Court of Appeals for the Federal Circuit by using the appellate CM/ECF system. Participants in the case who are registered CM/ECF users will be served by the appellate CM/ECF system. I further certify that all of the participants in this case are registered CM/ECF users.

/s/ Reynaldo C. Barceló
Reynaldo C. Barceló
Counsel of Record

BARCELÓ, HARRISON &
WALKER, LLP
2901 West Coast Hwy, Suite 200
Newport Beach, CA 92663

(949) 340-9736

*Counsel for Plaintiff-Appellant, TMI
Products, Inc.*

CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7) because:

X This brief contains 13,550 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii) and Local Rule 32(b).

_____ This brief uses a monospaced typeface and contains [state the number of] lines of text, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).

2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because:

X this brief has been prepared in a proportionally spaced typeface using Microsoft Word in Times New Roman 14 point font, or

_____ this brief has been prepared in a monospaced typeface using [state name and version of word processing program] with [state number of characters per inch and name of type style].

/s/ Reynaldo C. Barceló
Reynaldo C. Barceló
Counsel of Record

BARCELÓ, HARRISON &
WALKER, LLP
2901 West Coast Hwy, Suite 200
Newport Beach, CA 92663

(949) 340-9736

*Counsel for Plaintiff-Appellant, TMI
Products, Inc.*

ADDENDUM

ADDENDUM**TABLE OF CONTENTS**

Docket No.	File Date	Description	Appendix No.
149	May 23, 2014	Judgment	A1
61	Nov. 27, 2013	Order Re: Plaintiff's Motion for Partial Summary Judgment (DE 48)	A3
133	Apr. 30, 2014	Order Re: Plaintiff's Motion for Partial Summary Judgment on Defendant's Counterclaim (DE 71); Plaintiff's Motion for Summary Judgment of Infringement (DE 76); Defendant's Motion for Summary Judgment of Non-Infringement (DE 80); Plaintiff's Motion for Preliminary Injunction	A11
147	May 9, 2014	Order Re: Defendant's Motion to Dismiss (DE 142)	A19
1	Dec. 21, 2012	U.S. Patent No. 7,597,393	A25

1 BARCELO, HARRISON & WALKER, LLP
Reynaldo C. Barceló, CA State Bar No. 199741
2 E-mail: rey@bhiplaw.com
2901 West Coast Hwy, Suite 200
3 Newport Beach, California 92663
Telephone: (949) 340-9736
4 Facsimile: (949) 258-5752

NOTE: CHANGES MADE BY THE COURT

5 *Attorneys for Plaintiff and Counterclaim Defendant,*
6 *TMI Products, Inc.*

7 KOLISCH HARTWELL, P.C.
Owen W. Dukelow, CA State Bar No. 196265
email: owen@khpatent.com
8 David P. Cooper, Oregon Bar No. 880367 (admitted *pro hac vice*)
email: cooper@khpatent.com
9 Desmond J. Kidney, Oregon Bar No. 131558 (admitted *pro hac vice*)
email: desmond@khpatent.com
10 260 Sheridan Avenue, Suite 200
Palo Alto, California 94306
11 Telephone: (503) 224-6655
Facsimile: (503) 295-6679

12 *Attorneys for Defendant and Counterclaim Plaintiff*
13 *Rosen Electronics, L.P., f/k/a Rosen Entertainment Systems, L.P.*

14 UNITED STATES DISTRICT COURT
15 FOR THE CENTRAL DISTRICT OF CALIFORNIA

16 TMI PRODUCTS, INC.,

Case No. 5:12-cv-02263-RGK-SP

17
18 Plaintiff,

[PROPOSED] JUDGMENT

19 v.

20 ROSEN ELECTRONICS, L.P., f/k/a
21 ROSEN ENTERTAINMENT
SYSTEMS, L.P.

22
23 Defendant and
Counterclaim
24 Plaintiff,

25 v.

26 TMI PRODUCTS, INC.,

27 Counterclaim
28 Defendant.

1 For the reasons stated in:

- 2 • the Court's Order Granting Plaintiff's Motion for Partial Summary
3 Judgment on Defendant's patent invalidity counterclaim, dated
4 November 27, 2013 (Dkt. No. 61),
5 • the Court's Order on the Parties' Joint Stipulation Regarding Dismissal
6 of Certain Claims and Counterclaims, dated March 14, 2014 (Dkt. No.
7 70),
8 • the Court's Order Granting Defendant's Motion for Summary
9 Judgment of Non-Infringement, Denying Plaintiff's Motion for
10 Summary Judgment of Infringement and Motion for Preliminary
11 Injunction, and Denying Without Prejudice Plaintiff's Motion for
12 Partial Summary Judgment on Defendant's Ownership Counterclaim,
13 dated April 30, 2014 (Dkt. No. 133), and
14 • the Court's Order Dismissing Plaintiff's Breach of Contract Claim
15 Without Prejudice, dated May 9, 2014 (Dkt. No. 147);

16 IT IS ORDERED AND ADJUDGED:

17 that Plaintiff shall take nothing from Defendant **by way of this action**, and
18 that judgment for Defendant is granted.

19
20 Dated: May 23, 2014



21 Hon. R. Gary Klausner
22 United States District Court Judge
23
24
25
26
27
28

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

CIVIL MINUTES - GENERAL

Case No.	ED CV 12-02263-RGK (SPx)	Date	November 27, 2013
Title	<i>TMI Products, Inc. v. Rosen Electronics, L.P.</i>		

Present: The Honorable	R. GARY KLAUSNER, U.S. DISTRICT JUDGE
------------------------	---------------------------------------

Sharon L. Williams (Not Present) Deputy Clerk	Not Reported Court Reporter / Recorder	N/A Tape No.
--	---	-----------------

Attorneys Present for Plaintiffs:	Attorneys Present for Defendants:
Not Present	Not Present

Proceedings: (IN CHAMBERS) Order Re: Plaintiff's Motion for Partial Summary Judgment (DE 48)

I. INTRODUCTION

Plaintiff TMI Products, Inc. ("Plaintiff") filed this action in this Court on December 21, 2012. The Complaint alleges that Defendant Rosen Electronics, L.P. ("Defendant") infringed three of Plaintiff's patents ("Asserted Patents"), all of which relate to automotive headrest entertainment systems. On April 24, 2013, Defendant filed its Answer, asserting two counterclaims. The first counterclaim seeks a declaratory judgment that Defendant's products do not infringe Plaintiff's Asserted Patents. The second counterclaim alleges that Plaintiff's Asserted Patents are invalid. On October 17, 2013, Plaintiff brought this Motion for Partial Summary Judgment as to Defendant's invalidity defense.

For the reasons that follow, the Court **GRANTS** Plaintiff's Motion for Partial Summary Judgment, finding that Defendant is contractually estopped from challenging the validity of Plaintiff's Asserted Patents.

II. FACTUAL BACKGROUND

Plaintiff holds an exclusive license to U.S. Patent Nos. 7,040,697 ("the '697 Patent") and 7,407,227 ("the '227 Patent"). Plaintiff is the owner by assignment of U.S. Patent No. 7,597,393 ("the '393 Patent"). All three patents relate to automotive headrest entertainment systems. Plaintiff alleges that Defendant has directly infringed the Asserted Patents by, among other things, producing mobile video headrest systems. Plaintiff also alleges that Defendant has indirectly infringed the Asserted Patents by providing products to others for use in infringing products.

Plaintiff and Defendant have a history with one another dating back to at least 2005. In 2005, Defendant entered into a license agreement with Plaintiff, under which Plaintiff agreed to grant Defendant a nonexclusive license under several of Plaintiff's U.S. patents. On July 9, 2009, Plaintiff brought an action against Defendant ("the 2009 Action"), alleging that Defendant had infringed the

same patents asserted in the present action.

The 2009 Action was short-lived. On October 13, 2009, Plaintiff and Defendant entered into a second license agreement (“the 2009 Agreement”), effective retroactively to July 9, 2009. The 2009 Agreement specifically pertained to the three Asserted Patents. (*See* FAC, Ex. D at 1.) Under the 2009 Agreement, Plaintiff, as licensor, granted Defendant, as licensee, a non-exclusive license to manufacture and sell headrest-mounted display units that would otherwise infringe the Asserted Patents. (*See id.*) Plaintiff also agreed to release its claims against Defendant for past infringement.¹

At the heart of this dispute is a covenant made by Defendant not to challenge the validity of the Asserted Patents. The relevant text of the agreement reads

Licensee acknowledges the validity of the Licensed Patents and agrees to never challenge the validity of any claim of any of the Licensed Patents in any judicial, administrative, arbitration or other proceeding or to assist any third party in challenging the validity or scope thereof

(*Id.* at 2.)

On October 23, 2009, ten days after Plaintiff and Defendant signed the 2009 Agreement, Plaintiff voluntarily dismissed the 2009 Action. Because Defendant had not filed an answer or a motion for summary judgment, the dismissal was without prejudice. No settlement agreement was filed with the district court. At the time the 2009 Action was dismissed, Plaintiff had not yet filed proof that it served Defendant with a copy of the complaint.

On December 21, 2012, Plaintiff again filed a complaint against Defendant, giving rise to the present action in this Court. The Complaint raises substantially similar allegations to the 2009 Action. Plaintiff accuses Defendant of infringing the Asserted Patents, the same patents that were the subject of the 2009 Agreement. In its Answer, Defendant raised an invalidity defense. Plaintiff brought this Motion for Partial Summary Judgment on October 17, 2013, asserting that the 2009 Agreement estops Defendant from challenging the validity of the Asserted Patents.

III. JUDICIAL STANDARD

Pursuant to Federal Rule of Civil Procedure 56(a), a court may grant summary judgment only where “there is no genuine issue as to any material fact and [] the [moving party] is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). Upon such a showing, the court may grant summary judgment “on all or part of the claim.” Fed. R. Civ. P. 56(a).

To prevail on a summary judgment motion, the moving party must show that there are no triable issues of material fact as to matters upon which it has the burden of proof at trial. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 325 (1986). On issues where the moving party does not have the burden of proof at trial, the moving party needs to show only that there is an absence of evidence to support the non-moving party’s case. *See id.* at 326.

IV. DISCUSSION

¹The relevant text of the agreement reads as follows: “Licensor hereby releases Licensee from any and all claims, causes of action and the like which Licensor has ever had or may have ever had against Licensee on account of acts of infringement of the Licensed Patents committed by Licensee prior to the date of this Agreement.” (FAC, Ex. D, page 2.)

Plaintiff contends that the 2009 Agreement estops Defendant from challenging the validity of the Asserted Patents. To decide Plaintiff's Motion, this Court must confront the "radically different concerns" of the policies underlying the laws of contract and patent. *See Lear, Inc. v. Adkins*, 395 U.S. 653, 669 (1969). After weighing the several conflicting policies this dispute implicates, the Court finds that the 2009 Agreement bars Defendant's invalidity defense.

A. The Federal Circuits's Law Is Binding On This Court With Regard To The Question Presented

As a preliminary matter, the Court must determine whether the law of the Federal Circuit is binding precedent here. The Court finds that it is.

"[T]he question of whether a settlement agreement bars a party from challenging the validity of a patent in a subsequent action is intertwined with the substance of enforcement of a patent right." *Baseload Energy, Inc. v. Roberts*, 619 F.3d 1357, 1361 (Fed. Cir. 2010). For this reason, the Federal Circuit has held that its law applies to this question. *See, e.g., id.; Flex-Foot, Inc. v. CRP, Inc.*, 238 F.3d 1362, 1365 (Fed. Cir. 2001). The Court accordingly treats Federal Circuit case law as binding precedent in deciding this Motion.

B. The Unsettled Law Of Contractual Estoppel In Patent Law

Under ordinary principles of contract and estoppel, a party that has entered into a contract may be estopped from denying a term, fact, or performance arising from the contract. The resulting bar is sometimes termed "contractual estoppel" or "contractually created estoppel." *See, e.g., Flex-Foot, Inc. v. CRP, Inc.*, 238 F.3d 1362, 1368-69 (Fed. Cir. 2001) (using both terms interchangeably). Contractual estoppel may bar a party from raising defenses to suit that the party has agreed to waive. *See id.* In patent cases, however, even a party that has clearly and unambiguously agreed to waive its right to raise an invalidity defense may, under some circumstances, subsequently renege on the promise and raise the defense. *See, e.g., Massillon-Cleveland-Akron Sign Co. v. Golden State Advertising Co., Inc.*, 444 F.2d 425 (9th Cir. 1971); *Rates Technology Inc. v. Speakeasy, Inc.*, 685 F.3d 163 (2nd Cir. 2012). Whether a contract not to challenge validity will bar an invalidity defense in a patent action depends on whether "such contractually created estoppel is void as against public policy." *Flex-Foot*, 238 F.3d at 1368.

1. Lear v. Adkins

The contemporary approach to this issue traces its roots to the Supreme Court's decision in *Lear v. Adkins*, a case involving the defunct doctrine of "licensee estoppel." 395 U.S. 653 (1969). Prior to the decision in *Lear*, a licensee operating under a license agreement was estopped from denying the validity of the licensed patent in a suit for royalties. *See id.* at 656. This was so even if the parties had not made any specific covenant not to challenge the licensed patent's validity. *See id.* at 657-51. "The theory underlying this doctrine was that a licensee should not be permitted to enjoy the benefits of the agreement while simultaneously urging that the patent forming the basis of the agreement is void." *Flex-Foot*, 238 F.3d at 1368 (citing *Lear*, 395 U.S. at 656). The doctrine was thus premised not on parties' having voluntarily undertaken to waive an invalidity defense, but on what the Supreme Court called the "technical requirements of contract doctrine." *Lear*, 395 U.S. at 670.

The *Lear* Court noted that the demands of contract doctrine were in tension with the policies underlying patent law. "On the one hand, the law of contracts forbids a purchaser to repudiate his promises simply because he later becomes dissatisfied with the bargain he has made. On the other hand, federal law requires, that all ideas in general circulation be dedicated to the common good unless they are protected by a valid patent." *Id.* at 669. The Court continued, "[l]icensees may often be the only individuals with enough economic incentive to challenge the patentability of an inventor's discovery. If

they are muzzled, the public may continually be required to pay tribute to would-be monopolists without need or justification.” *Id.* at 670. Faced with this “basic conflict in policy,” *Id.* at 669, the Supreme Court reasoned that “the technical requirements of contract doctrine must give way before the demands of the public interest in the typical situation involving negotiation of a license after a patent has issued.” *Id.* at 670-71. The Court accordingly held that the patent license did not bar the licensee from challenging the validity of the licensed patent. *Id.*

Courts have interpreted *Lear v. Adkins* to require a balancing approach to contractual estoppel in patent law, in which courts weigh the various policies promoted by estoppel against the federal law policies the patent system promotes. *See, e.g., Rates Technology, Inc. v. Speakeasy, Inc.*, 685 F.3d 163, 168 (2nd Cir. 2012) (*Lear* established a “balancing test for weighing the public interest in discovering invalid patents against other competing interests”) (citation and internal quotations omitted).

2. *Post-Lear Cases*

In the decades following *Lear*, federal courts have identified additional policies courts must weigh before deciding whether a licensing contract bars an invalidity defense. In cases involving consent decrees, courts have noted that *Lear* “did not consider the policy concerns evoked when preserving the finality of a judgment.” *Foster v. Hallco Mfg. Co.*, 947 F.2d 469, 476 (Fed. Cir. 1991); *see also Rates Technology*, 685 F.3d at 169. Accordingly, courts have consistently applied principles of *res judicata* to bar invalidity defenses when there has been full litigation and a court has entered a final judgment. *See, e.g., Foster*, 947 F.2d at 476 (we “are aware of no court which has even suggested that *Lear* abrogates the application of *res judicata* principles based on a judgment imposed by the court after full litigation”). Similarly, where the licensing agreement was a settlement agreement, courts have weighed “the encouragement of settlement of litigation and the need to enforce such settlements in order to encourage the parties to enter into them.” *Hemstreet v. Spiegel, Inc.*, 851 F.2d 348, 350 (Fed. Cir. 1988); *see also Flex-Foot*, 238 F.3d at 1370 (“Upholding the terms of settlement agreements encourages patent owners to agree to settlements and promotes judicial economy”). The importance of the policy favoring settlement has led the Federal Circuit to conclude that, “while the federal patent laws favor full and free competition in the use of ideas in the public domain over the technical requirements of contract doctrine, settlement of litigation is more strongly favored by the law” than those technical requirements. *Flex-Foot*, 238 F.3d at 1370. Similarly, courts have implicitly recognized that the policies underlying contract doctrine, which favor the enforcement of voluntary private agreements, are more compelling in cases where a party has clearly and voluntarily agreed not to challenge a patent’s validity. *See, e.g., id.* at 1368 (“In *Lear*, notably, the license did not contain, and was not accompanied by, any promise by the licensee not to challenge the validity of the patent”); *Baseload*, 619 F.3d at 1361 (“invalidity and unenforceability claims may be released, but only if the language of the agreement or consent decree is clear and unambiguous”).

A handful of Federal Circuit cases offer guidance on how courts should assess the relative strength of these policies. In *Flex-Foot, Inc. v. CRP, Inc.*, the Federal Circuit considered whether a settlement agreement in which an alleged infringer agreed not to challenge a patent’s validity was void against public policy. 238 F.3d 1362. At the time the case was heard, it was the third litigation between the parties. *Id.* at 1363-64. The licensee had challenged the validity of the asserted patent twice before, voluntarily ending both challenges by entering into a licensing agreement. *Id.* In the second litigation, the parties conducted discovery and fully briefed summary judgment motions on the issue of invalidity. *Id.* at 1363. In the second settlement agreement, the licensee clearly and unambiguously promised not to challenge the validity of the asserted patent. *Id.* at 1364. Citing the policies favoring settlement and judicial economy, the Court held that the agreement barred the licensee from raising an invalidity defense in a third litigation between the parties:

Once the accused infringer has challenged patent validity, has had an opportunity to

conduct discovery on validity issues, and has elected to voluntarily dismiss the litigation with prejudice under a settlement agreement containing a clear and unambiguous undertaking not to challenge validity and/or enforceability of the patent in suit, the accused infringer is contractually estopped from raising any challenge in subsequent proceedings.

Id. at 1370. *Flex-Foot* thus clarified that, at least when specific factors were present, a settlement agreement could be enforced to estop a subsequent invalidity challenge. What remained unclear was whether all of the *Flex-Foot* factors (e.g., “an opportunity to conduct discovery,”) were necessary to enforce a settlement agreement, and, if not, how much weight courts should place on each one.

The Federal Circuit provided partial answers to these questions in *Baseload Energy, Inc. v. Roberts*, another case involving a prior settlement agreement and a subsequent patent invalidity challenge. 619 F.3d 1357 (Fed. Cir. 2010). The Federal Circuit clarified, albeit in dicta, that the *Flex-Foot* factors were “not determinative,” and that even if one or more factors were absent, a prior settlement agreement could bar an invalidity challenge under some circumstances. *Id.* at 1363.

[W]hile the absence of a prior dispute and litigation as to invalidity is pertinent, we do not think that a settlement agreement is ineffective to release invalidity claims unless the exact circumstances described in *Flex-Foot* are present. Each case must be examined on its own facts in light of the agreement between the parties. In the context of settlement agreements, as with consent decrees, clear and unambiguous language barring the right to challenge patent validity in future infringement actions is sufficient, even if invalidity claims had not been previously at issue and had not been actually litigated.

Id. The *Baseload* court ultimately held that the settlement agreement did not bar an invalidity defense because “the clear and unambiguous language necessary to effect a release of patent invalidity defenses [was] not present.” *Id.* at 1364.

Although *Baseload*’s comments on *Flex-Foot* appear to be dicta, the Court finds them persuasive. *Cf. Rates Technology*, 685 F.3d 163, 173 (2nd Cir. 2012) (declining to apply *Baseload* dicta).

C. Applying the *Lear*, *Flex-Foot*, and *Baseload* Framework

Taken together, *Lear*, *Flex-Foot*, and *Baseload* suggest a general framework for analyzing the problem presented in this case. The Court’s task is to balance “the public interest in discovering invalid patents,” *Rates Technology*, 685 F.3d at 168, against two broad policy concerns promoted by contractual estoppel: (1) the interest in promoting the settlement of disputes; and (2) the policies underlying contract, including the enforcement of voluntary agreements.² To assess the relative strength of these policy concerns, the Court must look to four primary factors: (1) the existence and extent of prior litigation between the parties, including whether validity was challenged in the prior litigation; (2) whether there was an opportunity to take discovery; (3) whether the agreement waiving the invalidity defense settled the litigation; and (4) whether there is clear and unambiguous language waiving the invalidity claim. *Baseload* suggests that if both the third and fourth factor are present, this may suffice to bar an invalidity claim. 619 F.3d at 1363.

²This dispute does not implicate the policy favoring the finality of judgments (res judicata) because the earlier litigation was dismissed without prejudice prior to final judgment.

1. *Factor One: Previous Litigation of Invalidity*

If the parties have previously litigated the issue of invalidity, this weighs in favor of enforcing an agreement to waive an invalidity defense. *See Flex-Foot*, 238 F.3d at 1370. However, the fact that parties have not litigated invalidity is not dispositive. *See Baseload*, 619 F.3d at 1363.

Plaintiff has brought one previous action alleging that Defendant infringed the Asserted Patents. Defendant did not file an answer in that action. As such, there is no indication that the parties have previously litigated the validity of the Asserted Patents.

The Court finds that Factor One does not weigh in favor of enforcing the 2009 Agreement to bar the invalidity defense.

2. *Factor Two: Opportunity to Take Discovery*

If the parties have previously had an opportunity to take discovery, it weighs in favor of enforcing their agreement to waive an invalidity defense. *See Flex-Foot*, 238 F.3d at 1370. The Second Circuit explained why discovery is relevant to the issue of contractual estoppel in *Rates Technology v. Speakeasy, Inc.*:

The fact that parties have conducted discovery seems to us significant in two respects. First, it suggests that the alleged infringer has had a full opportunity to assess the validity of the patent, and is therefore making an informed decision to abandon her challenge to its validity. Second, the fact that parties have conducted discovery is evidence that they had a genuine dispute over the patent's validity, and that the patent owner is not seeking to prevent its monopoly from being challenged by characterizing ordinary licensing agreements as settlement agreements.

685 F.3d at 172. In this case, it does not appear that the parties have taken discovery on the validity of the Asserted Patents. The Court does not find this factor dispositive, however, as the circumstances of this case mitigate some of the concerns identified in *Rates Technology*.

As the *Rates Technology* Court noted, discovery provides parties with an opportunity to inform themselves about the probable validity of the challenged patents. *Id.* This decreases the danger that settlement agreements will allow invalid patents to go undiscovered, depriving the public of inventions that belong in the public domain. That danger is mitigated somewhat by the circumstances of this case. The parties had already engaged in at least one licensing agreement prior to the 2009 Agreement. At the time of the 2009 Agreement, Defendant sold products that related to the subject matter of the Asserted Patents. The Asserted Patents are not unduly complex. For these reasons, Defendant likely had the capability and opportunity to independently assess the validity of the Asserted Patents prior to signing the 2009 Agreement.

The *Rates Technology* Court also suggested that an opportunity to take discovery guards against sham settlement agreements. *Id.* The court's concern was that licensors could bring actions against prospective licensees for no other reason than to convert their licensing agreement into a settlement agreement, thereby obtaining an enforceable waiver of invalidity claims from the licensee. *See id.* This case does not implicate that concern directly, as neither party has suggested that the earlier litigation was not brought in good faith.

In light of the above, the Court finds that Factor Two weakly weighs against enforcing the 2009 Agreement to bar the invalidity claim.

3. *Factor Three: Whether the Waiver is in a Settlement Agreement*

A covenant to waive an invalidity defense is more likely to be enforceable when it is contained in a settlement agreement, rather than a pre-litigation agreement. *Compare Flex-Foot*, 238 F.3d at 1370 (barring invalidity defense based on settlement agreement), *with Massillon-Cleveland-Akron Sign Co. v. Golden State Advertising Co., Inc.*, 444 F.2d 425 (9th Cir. 1971) (declining to enforce pre-litigation waiver of invalidity defense). This is because settlement agreements, unlike pre-litigation agreements, strongly promote the important policies favoring the settlement of disputes and judicial economy. Defendant contends that the 2009 Agreement was not properly a settlement agreement. The Court disagrees.

Defendant characterizes the 2009 Agreement as a “business agreement” rather than a settlement agreement. Defendant cites the fact that Plaintiff dismissed the 2009 Action without prejudice, and that the dismissal did not refer to the 2009 Agreement. Defendant thus argues that “the present case involves, in essence, a pre-litigation license.” (Def’s Opp. to Pl.’s Mtn for S.J. at 6.)

The text of the 2009 Agreement undercuts Defendant’s argument. In the section of the agreement labeled “Release of Past Infringement and Patent Enforcement,” Plaintiff specifically covenanted to release claims against Defendant. The agreement reads, “Licensor hereby releases Licensee from any and all claims, causes of action and the like which Licensor has ever had or may have ever had against Licensee on account of acts of infringement of the Licensed Patents committed by Licensee prior to the date of this Agreement.” (FAC, Ex. D at 2.) Moreover, the effective date of the 2009 Agreement, July 9, 2009, is the precise date that the 2009 Action was filed. This suggests that one of the goals of the 2009 Agreement was to resolve claims raised in the 2009 Action.

Defendant argues that there is nonetheless a factual dispute about whether the 2009 Agreement is better characterized as a settlement agreement or a business agreement. For this reason, Defendant contends, summary judgment is inappropriate. The Court disagrees. Defendant’s position misconstrues the nature of the *Lear* balancing test. The Court’s task is to determine, as a matter of law, whether this dispute implicates the policy favoring settlement. Enforcing the 2009 Agreement would promote the settlement of disputes because the 2009 Agreement released the claims brought in the 2009 Action. As a practical matter, the 2009 Agreement ended the 2009 Action because it released the claims underlying it. *Cf.* BLACK’S LAW DICTIONARY 1496 (9th ed. 2009) (defining “Voluntary Settlement” as “[a]n agreement ending a dispute or lawsuit. [...] Also termed *settlement agreement*”). For this reason, any factual dispute about whether the 2009 Agreement is better characterized as a business agreement or a settlement agreement is largely immaterial.

In light of the above, the Court finds that Factor Three strongly weighs in favor of enforcing the 2009 Agreement to bar Defendant’s invalidity defense.

4. *Factor Four: Whether Waiver is Clear and Unambiguous*

A waiver of an invalidity defense must be clear and unambiguous. *See Baseload*, 619 F.3d at 1364. A settlement agreement that contains such a waiver may suffice to bar an invalidity defense in a subsequent action. *See id.*

The text of the 2009 Agreement’s covenant not to challenge validity reads as follows:

Licensee acknowledges the validity of the Licensed Patents and agrees to never challenge the validity of any claim of any of the Licensed Patents in any judicial, administrative, arbitration or other proceeding or to assist any third party in challenging the validity or scope thereof

(See FAC, Ex. D at 2.) The Court finds that this is a clear and unambiguous waiver of the invalidity defense.

Because Defendant clearly agreed to waive the invalidity defense, this dispute implicates contract law's strong policy favoring the enforcement of voluntary private agreements. The policies of contract law are therefore more compelling in this case than they were in *Lear*. As the Federal Circuit has noted, *Flex-Foot*, 238 F.3d at 1368, *Lear* involved estoppel based on a patent license alone, not an explicit promise not to challenge validity. Had the parties in *Lear* entered an agreement explicitly waiving a validity challenge, the case would have involved more than the mere "technical requirements of contract doctrine." See *Lear*, 395 U.S. at 670. The case instead would have implicated, as this dispute does, a core policy of contract doctrine—the enforcement of voluntary agreements. As such, this dispute presents a more compelling case for upholding estoppel in the face of countervailing public policy concerns.

In light of the above, the Court finds that Factor Four strongly favors enforcing the 2009 Agreement to bar Defendant's invalidity defense.

5. *Weighing the Countervailing Policies*

Having assessed the strength of the various policies this dispute implicates, the Court must now "balance the public interest in discovering invalid patents against other competing interests." See *Rates Technology*, 685 F.3d at 168. The Court finds that, under these circumstances, competing interests outweigh the public interest in discovering invalid patents. Specifically, the Court is persuaded that the policies favoring settlement and the enforcement of private agreements dictate that the 2009 Agreement should be enforced to bar Defendant's invalidity defense.

V. CONCLUSION

In light of the above, the Court **GRANTS** Plaintiff's Motion for Partial Summary Judgment. Defendant is accordingly barred from challenging the validity of the Asserted Patents in this action.

IT IS SO ORDERED.

Initials of Preparer

_____ : _____

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

CIVIL MINUTES - GENERAL

Case No. **ED CV 12-02263-RGK (SPx)** Date April 30, 2014

Title ***TMI Products, Inc. v. Rosen Electronics, L.P.***

Present: The
Honorable

R. GARY KLAUSNER, U.S. DISTRICT JUDGE

Sharon L. Williams (Not Present)

Not Reported

N/A

Deputy Clerk

Court Reporter / Recorder

Tape No.

Attorneys Present for Plaintiffs:

Attorneys Present for Defendants:

Not Present

Not Present

Proceedings:

(IN CHAMBERS) Order Re: Plaintiff's Motion for Partial Summary Judgment on Defendant's Counterclaim (DE 71); Plaintiff's Motion for Summary Judgment of Infringement (DE 76); Defendant's Motion for Summary Judgment of Non-Infringement (DE 80); Plaintiff's Motion for Preliminary Injunction (DE 81)

I. INTRODUCTION

Plaintiff TMI Products, Inc. ("Plaintiff") filed this action in this Court on December 21, 2012. Plaintiff holds an exclusive license to U.S. Patent Nos. 7,040,697 ("the '697 Patent") and 7,407,227 ("the '227 Patent"). Plaintiff is the owner by assignment of U.S. Patent No. 7,597,393 ("the '393 Patent"). The Complaint alleged that Defendant Rosen Electronics, L.P. ("Defendant") infringed the three patents, all of which relate to automotive headrest entertainment systems. The Complaint also alleged breach of contract. On April 24, 2013, Defendant filed its Answer, asserting two counterclaims. The first counterclaim seeks a declaratory judgment that Defendant's products do not infringe Plaintiff's Asserted Patents. The second counterclaim alleges that Plaintiff's Asserted Patents are invalid.

On November 27, 2013, the Court granted summary judgment on Defendant's invalidity counterclaim, holding that an earlier licensing agreement between the parties barred Defendant's invalidity defense.

On March 7, 2014, the parties jointly stipulated to dismiss Plaintiff's infringement claims related to the '697 Patent and the '227 Patent. The parties also jointly stipulated to dismiss Defendant's first counterclaim (alleging non-infringement) with respect to the '697 and '227 Patents and Defendant's Second Counterclaim (alleging unenforceability and non-ownership) with respect to the '697 and '227 Patents. Plaintiff's remaining claims are for breach of contract and infringement of the '393 Patent.

On March 17, 2014, Plaintiff filed two Motions for Summary Judgment. The first is for partial summary judgment as to Defendant's Second Counterclaim related to patent ownership. The second is for summary judgment of infringement of Claim 1 of the '393 Patent. Plaintiff also filed a Motion for a

Preliminary Injunction, asking that Defendant be enjoined from infringing the '393 Patent. On March 17, 2014, Defendant filed a Motion for Summary Judgment of non-infringement of the '393 Patent.

For the reasons that follow, the Court **DENIES** Plaintiff's motions. The Court **GRANTS** Defendant's Motion for Summary Judgment of Non-Infringement.

II. FACTUAL BACKGROUND

Plaintiff is the owner by assignment of U.S. Patent No. 7,597,393 ("the '393 Patent"). The patent relates to automotive headrest entertainment systems. Plaintiff alleges that Defendant has directly infringed the '393 Patent by, among other things, producing mobile video headrest systems. Plaintiff also alleges that Defendant has indirectly infringed the Asserted Patents by providing products to others for use in infringing products.

A. Claim 1 of the '393 Patent

For purposes of these motions, the only relevant claim of the '393 Patent is Claim 1. Claim 1 of the '393 Patent reads as follows.

What is claimed is:

1. A media assembly adapted to be installed into a seat back of a vehicle, the assembly comprising:
 - a mounting structure that is coupled to the seat back of the vehicle wherein the seat back defines a first outer surface visible to a viewer sitting in a back seat of the vehicle;
 - a display that displays media to a viewer sitting within the vehicle;
 - a media player having an input opening into which a user can position a media storage device wherein the media player provides signals to the display to thereby induce the display to visually display the contents of the media storage device;
 - a housing defining a recess having a first opening that receives both the display and the media player such that the display is positioned proximate the first opening of the recess with the media player positioned inward in the recess from the first opening such that the media player does not impede visual access to the display **wherein the housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player** and
 - wherein the housing is adapted to be coupled to the mounting structure within the seat back of the vehicle to thereby retain the housing within the seat back such that the display is positioned adjacent the outer surface of the seat back;
 - wherein the housing defines a second opening and the media player is positioned within the recess such that the input opening of the media player is accessible through the second opening of the housing.

(Emphasis added.)

B. Defendant's Products

Plaintiff's Complaint alleges that the Rosen AV7900 and Rosen CS9000 products literally infringe claim 1 of the '393 Patent.

According to Curt Kucera, Defendant's designated Rule 30(b)(6) representative, "the CS9000 product is simply a re-branding of the same AV product that we have been talking about [AV7900], so I

directed my staff to create a product labeling to change the brand.” (Barcelo Decl., at Ex. 14 (Kucera Depo.), at 101:17-22.). Both the AV7900 and CS9000 consist of a media player located in the rear of a headrest. Both have a slot located at the top of the headrest for insertion of media. The screens of both products lie flush with the headrest.

III. JUDICIAL STANDARD

Pursuant to Federal Rule of Civil Procedure 56(a), a court shall grant summary judgment where “there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a).

To prevail on a summary judgment motion, the moving party must show that there are no triable issues of material fact as to matters upon which it has the burden of proof at trial. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 325 (1986). On issues where the moving party does not have the burden of proof at trial, the moving party must show only that there is an absence of evidence to support the non-moving party’s case. *See id.* at 326.

IV. DISCUSSION

The parties’ motions call on the Court to resolve whether the accused products infringe the ‘393 Patent as a matter of law. As Plaintiff notes, “[t]he only dispute between the parties that is material to the conclusion of infringement in this case concerns the scope of claim 1 of U.S. Patent 7,597,393 (the ‘393 Patent’).” (Pl.’s Mem. Supp. Mot. S.J. at 1.)¹ The parties thus agree that “no factual dispute exists as to the structure or operation of Rosen’s products. The only dispute is a legal issue as to the scope of the patent claim ...” (Def.’s Mem. Supp. Mot. S.J. at 2.)

The parties’ disagreement about the proper construction of Claim 1 centers on the phrase “the housing is *structured to permit selective access* to the input opening of the media player” (emphasis added). Defendant contends that Claim 1 describes a housing structured to permit a user to choose between having access or not having access to the input opening of the media player. A housing capable of pivoting in a headrest to expose the input opening is one example of such a device. Plaintiff contends that the scope of Claim 1 is not so limited.

Under Defendant’s proposed construction, Defendant is entitled to summary judgment of non-infringement. Under Plaintiff’s proposed construction, Plaintiff is entitled to summary judgment of infringement. After construing Claim 1 of the ‘393 Patent, the Court finds that the accused products do not infringe the ‘393 Patent as a matter of law. The products do not have a housing capable of permitting a user to render the input opening of the media player accessible or inaccessible at the user’s election.

A. Law Applicable to Claim Construction

“[T]he court has the power and obligation to construe as a matter of law the meaning of language used in the patent claim. As such, ‘[a] patent covers the inventions or inventions which the court, in construing its provisions, decides that it describes and claims.’” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (quoting 3 WILLIAM C. ROBINSON, *THE LAW OF PATENTS FOR USEFUL INVENTIONS* § 1019, at 247 (1890)). “To ascertain the meaning of claims, we consider three sources: The claims, the specification, and the prosecution history.” *Id.* (quoting *Unique Concepts, Inc. v. Brown*, 939

¹All citations to Plaintiff’s Memorandum in Support of Motion for Summary Judgment refer to the Motion for Summary Judgment of Infringement.

F.2d 1558, 1561 (Fed. Cir. 1991)). “Expert testimony, including evidence of how those skilled in the art would interpret the claims, may also be used.” *Id.* (quoting *Fonar Corp. v. Johnson & Johnson*, 821 F.2d 627, 631 (Fed. Cir. 1987)).

B. Plaintiff’s Proposed Construction

Plaintiff proposes what it contends is a “plain meaning” construction of “to permit selective access.” Plaintiff argues

“To permit,” of course, simply means “to allow.” “Access” (as a noun, which is how it is being used) has many meanings and connotations, but the simplest and most applicable in the present context is “the condition of allowing entry.” “Selective” (an adjective) simply refers to choice. Hence, the ordinary meaning of “selective” applies whenever a user has a choice, or an action is optional and not mandatory. So, if the simple phrase “to permit selective access” is to be changed to something else by the Court (and TMI contends there is no good reason to do this) it could acceptably be changed to: “to allow choice for entry.”

(Pl.’s Mem. Supp. Mot. S.J. at 9.) Under Plaintiff’s proposed construction, the housing described in Claim 1 must be structured to give a user the choice to access the input opening of the media player. In other words, the input opening must be accessible. The housing need not, however, be structured to permit a user to render the input opening inaccessible by, for instance, pivoting the device to obscure the input opening.

C. Defendant’s Proposed Construction

Plaintiff proposes a different construction. Plaintiff argues that “[i]n the phrase ‘selective access,’ ‘selective’ is an adjective modifying the noun ‘access,’ and thus the phrase refers to selecting access and non-access, i.e., switching between having and not having access ...” (Def.’s Mem. Supp. Mot. S.J. at 9.) Plaintiff further argues that

The construction required, by the ‘393 patent claim language, the specification of the ‘393 patent, the prosecution history of the ‘393 patent and related applications, and extrinsic evidence, is ...

the housing is movable between a deployed orientation wherein in the user can insert the media storage device in the input opening of the media player and a retracted orientation wherein the user does not have access to the input opening of the media player, and the input opening of the media player is not accessible through a second outer surface of the seat back, such as a top surface or a side surface of the seat back.

(*Id.*)

D. Defendant’s Proposed Construction Is More Plausible In Light Of The Claim Language

In assessing the parties’ proposed constructions of Claim 1, the Court begins with the dictionary definitions of the words “permit,” “selective,” and “access.” *See Markman*, 52 F.3d at 980 (Explaining that, while “a patentee is free to be his own lexicographer ... [,] any special definition given to a word must be clearly defined in the specification.”)(citations omitted.). As used in this context, “permit” is a verb meaning “to make possible.” MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY 923 (11th Ed. 2004). As used in this context, “selective” is an adjective meaning “of, or relating to, or characterized by selection.” *Id.* at 1125. As used in this context, “access” is a noun meaning “freedom or ability to

obtain or make use of something.” *Id.* These definitions are not particularly helpful in assessing the parties’ proposed claim constructions. The parties do not dispute that the adjective “selective” modifies the noun “access.” Thus the parties agree that “selective access” means access that somehow is characterized by, or involves, selection or choice.

The parties disagree, however, as to what kind of selection or choice characterizes the access Claim 1 describes. Plaintiff would construe “selective access” to refer to a user’s choice to either position a media storage device (a DVD, for instance) within the player or to refrain from doing so. Plaintiff argues

considering the longer phrase “the housing is structured to permit selective access to the input opening of the media player” in claim 1, plainly it is the user who must make the choice or selected action; the housing merely “permits” that choice to be made by the user. This is clear from the context of claim 1 itself, which describes the permitted user action (*i.e.*, to be selected or non-selected by the user) as “to permit user positioning of the media storage device within the player.”

(Pl.’s Mem. Opp. Def.’s Mot. S.J. at 10.) (emphasis in original.)

Defendant, by contrast, contends that the phrase “selective access” “refers to selecting access and non-access, *i.e.*, switching between having and not having access.” (Def.’s Mem. Supp. Mot. S.J. at 9.) Defendant argues that Plaintiff

ignores that the “selective access” is “to permit user positioning of the media storage device within the player.” This part of the claim term requires that sometimes the user is not permitted to, *i.e.*, cannot, place the media storage device within the player, which is the only meaning consistent with “selective access.”

(*Id.*)

Plaintiff’s construction of the language of Claim 1 is implausible, for it creates at least two redundancies in the language of the claim. First, Plaintiff’s construction of “selective access” renders the word “selective” redundant. If “to permit selective access” referred to the user’s choice to either access the device or not, the word “selective” could be omitted entirely without doing any violence to the limitation’s meaning. By definition, one with access to an object may choose whether or not to make use of it. Second, Plaintiff’s construction appears to render the term “the housing is structured to permit selective access to the input opening of the media player” redundant with the final limitation of Claim 1. The final limitation reads “wherein the housing defines a second opening and the media player is positioned within the recess such that the input opening of the media player is accessible through the second opening of the housing.” Under Plaintiff’s construction of “to permit selective access”—that is, to permit a user the choice to access—the final limitation merely describes the specific structure of the housing that permits “selective access.” Under this construction, the limitation “wherein the housing is structured to permit selective access” would simply be a broader version of the final limitation. Both would require that the housing permit access to the input, but the final limitation would more narrowly define how the housing’s structure must permit such access. The problem with this construction is that it renders the limitation containing “to permit selective access” unnecessary, for the narrower final limitation would also describe a housing that is structured to permit selective access. It is a basic canon of construction that interpretations that render one or more terms meaningless or redundant are disfavored. *See, e.g., Burdon Cent. Sugar Refining Co. v. Payne*, 167 U.S. 127, 142 (1897) (“We should remember that the contract must be so construed as to give meaning to all its provisions, and that that interpretation would be incorrect which would obliterate one portion of the contract in order to enforce another part thereof.”). *See also Markman*, 52 F.3d at 978 (citing *Doble Eng’g Co. v. Leeds & Northrup*

Co., 134 F.2d 78, 83 (1st Cir. 1943) (“It appears to be firmly established that ... a patent is subject to the same general rules of construction as any other written instrument.”)).

By contrast, Defendant’s construction of “to permit selective access” does not create redundancies in the language of Claim 1. Under this construction, “selective” refers to the choice to render the input opening accessible or inaccessible. Read in its broader context, the limitation containing the phrase “to permit selective access” describes a housing that is structured to allow a user to render the input opening inaccessible. (A housing that pivots in the headrest to expose or hide the input opening would be so structured, though the scope of Claim 1 is not limited to housing that pivots.) Unlike in Plaintiff’s construction, in Defendant’s construction the word “selective” has meaning that is not adequately captured by the word “access.” This construction has the additional benefit of being in harmony with the final limitation of Claim 1. Under Defendant’s construction, the two limitations describe different properties of the housing. As described above, the limitation containing the phrase “to permit selective access” refers to the feature of the housing allowing the input opening to be concealed or exposed at the user’s election. The final limitation describes the property of the housing (specifically, the housing’s second opening) allowing access to the media input opening through the housing when the opening is not otherwise concealed.

E. The Prosecution History Supports Defendant’s Construction

The Court now turns to the prosecution history of the ‘393 Patent. Defendant argues that the prosecution history demonstrates that Plaintiff disclaimed the systems depicted in Figures 9A to 10 of the ‘393 Patent. Figures 9A to 10 depict systems that resemble Defendant’s products. As such, if Plaintiff disclaimed coverage of the depicted systems, it would support Defendant’s contention that Claim 1 does not cover the accused products. The Court has closely reviewed the prosecution history. As to Defendant’s disclaimer argument, the evidence in the prosecution history is inconclusive. As the Court notes in Section F, it is unclear exactly what is and is not depicted in Figure 10.

The prosecution history does, however, lend strong support to Defendant’s interpretation of the phrase “to permit selective access.” It is clear from the prosecution history that the patent examiner’s interpretation of that phrase was consistent with Defendant’s proposed construction. On July 10, 2007, the patent examiner rejected Claim 1, among other claims, as being anticipated by the prior art.² The examiner wrote

With respect to Claim 1, Vitito discloses a media assembly (10) adapted to be installed in a seat back (50) of a vehicle [...] *wherein the housing is structured to permit selective access, because it pivots in and out of carrier member (17), to the input opening (un-illustrated) of the media player (216) to permit user positioning of the media storage device (unlabeled) within the player* ...

(Parnel Decl. Supp. Def.’s Mot. S.J., Ex. I, at 5-6. (Emphasis added.)) The patent examiner also used substantially the same language to describe the Vitito disclosures on November 7, 2007. (*Id.*, Ex. K, at 3.) These communications demonstrate that the examiner understood “structured to permit selective access” to mean capable of being made accessible or inaccessible by, for instance, pivoting in the recess. This closely resembles the construction Defendant proposes.

F. Ambiguities In The Specification Do Not Overcome Convincing Evidence In Claim Language And Prosecution History

²The ‘393 Patent was eventually granted after the PTO revised its decision.

Plaintiff contends that some of the figures in the specification, including Figure 10, are inconsistent with Defendant's proposed construction. Plaintiff argues

Some of the claims of the [patent] (*e.g.* claim 4) include language requiring the housing to be pivotally attached to the mounting structure, so that the display (306) may be rotated to an extended position where the input opening of the media player (308) is exposed, for example as shown in Fig. 11C. Other claims of the '393 Patent (*e.g.*, claim 1) do *not* include any language requiring the housing to be pivotally attached to the mounting structure, but rather require that the media player be accessible through a second opening in the housing, for example as shown in Figure 10.

(Pl.'s Mem. Supp. Mot. S.J. at 2.)(emphasis in original.) The Court disagrees with Plaintiff's construction of Claim 1 and finds that it is unclear precisely what is depicted in Figure 10.

As an initial matter, the Court agrees that Claim 1 does not require "the housing to be *pivotally* attached to the mounting structure." Claim 1 is broader. It requires only that the housing be "structured to permit selective access to the input opening of the media player." This selective access—the capability to switch between accessible and inaccessible orientations—could be achieved by a pivot, or through some other mechanism. Nor is the requirement that the media player be accessible through a second opening in the housing incompatible with housing that is structured to permit selective access. By way of example, take a device with housing that (1) pivots to expose the input opening of a media player, and (2) has a second opening exposing that input opening. Such a device may be installed in a headrest with an opening in the top like the one depicted in Figure 10 of the '393 Patent. A user of a device installed in this manner would always have access to the input opening, either by rotating the device to expose the opening or by accessing it through the headrest. Alternatively, the device could be installed in a headrest with no such opening, in which case a user would be required to rotate the housing to access the input opening. In either case, the structure of the *housing* would be the same. The difference between the two systems would lie in the structure of the headrest, not the housing. Regardless of the structure of the headrest in which it is installed, such a housing would be "structured to permit selective access to the Input opening." That selective access is not possible with some species of headrest is immaterial.

Nothing in Figure 10 clearly contradicts this construction of Claim 1. According to the brief description of the drawings in the specification, Figure 10 "illustrates another embodiment of a video system for the vehicle seat having the head restraint with the integrated video monitor and a top-loading media player." Figure 10 does not depict the structure of the housing, if any, holding the integrated video monitor. For this reason, Figure 10 is not helpful in construing the phrase "the housing is structured to permit selective access to the input opening of the media player." The housing of the device depicted in Figure 10 could, for instance, allow the media player to pivot in the headrest. Figure 10 is simply too ambiguous to overcome the convincing evidence supporting Defendant's construction of Claim 1.

G. It Is Not Necessary To Adopt Defendant's Proposed Construction In Its Entirety

Defendant asks the Court to read an additional limitation into Claim 1. Defendant argues that Claim 1 should be construed to require that "the input opening of the media player is not accessible through a second outer surface of the seat back, such as a top surface or a side surface of the seat back." The Court declines to read this limitation into the claim. The Court construes "the housing is structured to permit selective access to the input opening" to mean that the housing is structured to be capable of moving between an accessible and an inaccessible orientation.

H. The Accused Products Do Not Infringe The '393 Patent

Having construed Claim 1 of the '393 Patent, the Court finds that the accused products do not infringe the '393 Patent. The Court has examined examples of the accused devices *in camera*. In light of the Court's construction of the '393 Patent, the Court finds that a reasonable factfinder could not conclude that the accused products' housing is "structured to permit selective access to the input opening." The accused products' housing sits within the recess of the headrest, and cannot be manipulated to expose the input opening, which is always accessible from the top of the headrest. The accused products therefore do not fall within the scope of any of the '393 Patent's claims.

I. Plaintiff's Motion For Summary Judgment On Defendant's Ownership Counterclaim Appears To Be Moot

This Order appears to render moot Plaintiff's Motion for Summary Judgment on Defendant's Ownership Counterclaim. However, the Court has not yet dismissed Plaintiff's breach of contract claim,³ and it is unclear whether that claim will require the Court to resolve issues related to patent ownership. The Court will accordingly deny without prejudice Plaintiff's Motion for Summary Judgment on Defendant's Ownership Counterclaim.

J. Plaintiff Is Not Entitled To An Injunction

Plaintiff has requested a preliminary injunction enjoining Defendant from infringing the '393 Patent. Because the Court has determined that Defendant's products do not infringe the '393 Patent, Plaintiff is not entitled to the requested injunction.

V. CONCLUSION

For the above reasons, the Court **DENIES** Plaintiff's Motion for Summary Judgment of Infringement and Motion for Preliminary Injunction. The Court **DENIES without prejudice** Plaintiff's Motion for Partial Summary Judgment on Defendant's Ownership Counterclaim. The Court **GRANTS** Defendant's Motion for Summary Judgment of Non-Infringement.

IT IS SO ORDERED.

Initials of Preparer

:

³The Court's finding of non-infringement would appear to resolve the breach of contract claim. However, because the parties have not briefed that issue, the Court declines to decide at this juncture whether the contract claim must also be dismissed.

JS-6

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

CIVIL MINUTES - GENERAL

Case No.	ED CV 12-02263-RGK (SPx)	Date	May 9, 2014
Title	<i>TMI Products, Inc. v. Rosen Entertainment Systems L.P.</i>		

Present: The Honorable	R. GARY KLAUSNER, U.S. DISTRICT JUDGE
------------------------	---------------------------------------

Sharon L. Williams (Not Present)	Not Reported	N/A
Deputy Clerk	Court Reporter / Recorder	Tape No.

Attorneys Present for Plaintiffs:

Not Present

Attorneys Present for Defendants:

Not Present

Proceedings: (IN CHAMBERS) Order re: Defendant's Motion to Dismiss (DE 142)

I. INTRODUCTION AND BACKGROUND

Plaintiff TMI Products, Inc. ("Plaintiff") filed this action in this Court on December 21, 2012. Plaintiff holds an exclusive license to U.S. Patent Nos. 7,040,697 ("the '697 Patent") and 7,407,227 ("the '227 Patent"). Plaintiff is the owner by assignment of U.S. Patent No. 7,597,393 ("the '393 Patent"). The Complaint alleged that Defendant Rosen Electronics, L.P. ("Defendant") infringed the three patents, all of which relate to automotive headrest entertainment systems. The Complaint also alleged breach of contract. On April 24, 2013, Defendant filed its Answer, asserting two counterclaims. The first counterclaim seeks a declaratory judgment that Defendant's products do not infringe Plaintiff's Asserted Patents. The second counterclaim alleges that Plaintiff's Asserted Patents are invalid.

On November 27, 2013, the Court granted summary judgment on Defendant's invalidity counterclaim, holding that an earlier licensing agreement between the parties barred Defendant's invalidity defense.

On March 7, 2014, the parties jointly stipulated to dismiss Plaintiff's infringement claims related to the '697 Patent and the '227 Patent. The parties also jointly stipulated to dismiss Defendant's first counterclaim (alleging non-infringement) with respect to the '697 and '227 Patents and Defendant's Second Counterclaim (alleging unenforceability and non-ownership) with respect to the '697 and '227 Patents. Plaintiff's remaining claims were for breach of contract and infringement of the '393 Patent.

On March 17, 2014, Defendant filed a Motion for Summary Judgment of non-infringement of the '393 Patent. The Court granted summary judgment of non-infringement on May 1, 2014. Plaintiff's

sole remaining claim is for breach of contract.

On May 6, 2014, Defendant filed a Motion to Dismiss Plaintiff's breach of contract claim. Defendant contends that the sole remaining claim has its basis in state law, and requests that the Court decline to exercise pendent jurisdiction over the claim. For the reasons that follow, the Court finds that the sole remaining claim is a state law claim and that dismissal is appropriate. The Court accordingly **GRANTS** Defendant's motion and dismisses Plaintiff's breach of contract claim without prejudice.

II. JUDICIAL STANDARD

Section 1367(c) provides that

(c) The district courts may decline to exercise supplemental jurisdiction over a claim under subsection (a) if--

- (1) the claim raises a novel or complex issue of State law,
- (2) the claim substantially predominates over the claim or claims over which the district court has original jurisdiction,
- (3) *the district court has dismissed all claims over which it has original jurisdiction, or*
- (4) in exceptional circumstances, there are other compelling reasons for declining jurisdiction.

28 U.S.C. § 1367 (emphasis added). In deciding whether to retain pendent jurisdiction over state law claims, district courts weigh the interests of economy, convenience, fairness, and comity. *Imagineering, Inc. v. Kiewit Pacific Co.*, 976 F.2d 1303, 1309 (9th Cir. 1992). While "the weighing of these factors by the district court is discretionary," "in the usual case in which federal-law claims are eliminated before trial, the balance of factors will ... point toward declining to exercise jurisdiction over the remaining state-law claims." *Id.* (quoting *Carnegie-Mellon Univ. v. Cahill*, 484 U.S. 343, 350 n. 7 (1988)).

III. DISCUSSION

A. The Court Correctly Declined to Decide Issues of Ownership

Plaintiff requests the Court to resolve the parties' dispute regarding ownership. Defendant raised the issue of ownership in this case by way of a counterclaim for a declaratory judgment on June 19, 2013. On April 30, 2014, the Court granted Defendant's Motion for Summary Judgment of Non-Infringement, finding that the accused products do not infringe the asserted patent. The Court also denied Plaintiff's Motion for Summary Judgment on the issue of ownership. The Court declines to reconsider this decision.

28 U.S.C. § 2201(a) governs this Court's power to issue declaratory relief. It provides "[i]n a case of actual controversy within its jurisdiction ... any court of the United States, upon the filing of an appropriate pleading, *may* declare the rights and other legal relations of any interested party seeking such declaration, whether or not further relief is or could be sought." (emphasis added.)

The Declaratory Judgment Act provides that a court "*may* declare the rights and other legal relations of any interested party," ... not that it must do so. This text has long been understood "to confer on federal courts unique and substantial discretion in deciding whether to declare the

rights of litigants.”

MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118, 136 (2007) (quoting *Wilton v. Seven Falls Co.*, 515 U.S. 277, 286 (1995)). “We have found it ‘more consistent with the statute,’ however, ‘to vest district courts with discretion in the first instance, because facts bearing on the usefulness of the declaratory judgment remedy, and the fitness of the case for resolution, are peculiarly within their grasp.’” *Id.* (quoting *Wilton v. Seven Falls Co.*, 515 U.S. 277, 289 (1995)).

Considerations of economy, restraint, and comity counsel against deciding the ownership issue. To do so would be uneconomical, for the Court has already decided that the accused products do not infringe the asserted patents. Having decided the patent claims on this narrower ground, the Court hesitates to decide the more expansive issue of ownership. While the issue of infringement only affects the rights and obligations between the parties to this suit, the issue of ownership could affect whether Plaintiff has any patent rights at all. The Court believes it is wise to refrain from unnecessarily deciding this much broader issue. Finally, as discussed more fully below, the Court believes that the sole remaining claim, a state law breach of contract claim, is better suited to resolution by a state court. Patent ownership is generally a question of state law. *Enovsys v. Nextel Communications, Inc.*, 614 F.3d 1333, 1342 (Fed. Cir. 2010) (citing *Akazawa v. Link New Tech.*, 520 F.3d 1354, 1357 (Fed. Cir. 2008); see also *Jim Arnold Corp. v. Hydrotech Sys., Inc.*, 109 F.3d 1567, 1571 (Fed.Cir.1997) (“It may seem strange at first blush that the question of whether a patent is valid and infringed ordinarily is one for federal courts, while the question of who owns the patent rights and on what terms typically is a question exclusively for state courts. Yet that long has been the law.”) As such, if patent ownership remains contested, a state court will be well suited to resolve whether Plaintiff owns the asserted patents.

In light of the above considerations, the Court properly denied Defendant’s Motion for Summary Judgment and declined to decide the issue of ownership.

B. Plaintiff Clearly Had Standing To Bring Its Infringement Claim

Plaintiff also contends that this Court must resolve the ownership issue in order to determine whether Plaintiff had Article III standing to bring this action in federal court. Plaintiff contends that

assuming, for the sake of argument, that Rosen’s views regarding TMI’s ownership in the ’393 patent were correct, then the Court never had jurisdiction over this action, and its summary judgment rulings on patent validity (Dkt. # 61), claim construction (Dkt. # 133) and infringement (Dkt. # 133) must be vacated (not to mention that the Court could not exercise jurisdiction over TMI’s breach of contract claim).

Plaintiff’s argument misinterprets the doctrine of standing and the relevant case law. To have standing to bring an action in federal court, a plaintiff must allege an injury-in-fact that is fairly traceable to defendant’s conduct and that is likely to be redressed by the requested relief. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992). This is a garden variety patent infringement case, in which Plaintiff alleged that Defendant has infringed a patent Plaintiff owns. In such a case, the mere fact that Defendant contests Plaintiff’s ownership does not, in itself, place Plaintiff’s standing in question. If it did, all federal courts hearing patent cases would be required to resolve factual disputes about patent ownership before exercising jurisdiction. Article III’s case or controversy requirement has never been interpreted to require this kind of preliminary inquiry.

Nor has section 1338. 28 U.S.C. § 1338. To invoke the jurisdiction of a federal court under section 1338, a Plaintiff must “allege facts that demonstrate that he, and not the defendant, owns the patent rights on which the infringement suit is premised.” *Jim Arnold Corp. v. Hydrotech Systems, Inc.*,

109 F.3d 1567, 1571 (Fed. Cir. 1997). While these allegations must have “a plausible foundation,” *id.*, the Court is aware of no case law requiring a Plaintiff to affirmatively prove ownership before bringing a patent infringement suit in federal court.

The cases Plaintiff cites are inapposite. Plaintiff relies heavily on *Larson v. Correct Craft, Inc.*, 569 F.3d 1319 (Fed. Cir. 2009). But *Larson* involved a suit under section 256 for correction of ownership, not a suit for patent infringement. The plaintiff in *Larson* had affirmatively transferred title to the patents to the defendant at the time of suit. *Id.* at 1326. As such,

he [stood] to reap no benefit from a preexisting licensing or royalties arrangement. He is only path to financial reward under § 256 in this case involve[d] him first succeeding on his state-law claims and obtaining rescission of the patent assignments. With his ownership of the ... patents being contingent in this manner, Larson ha[d] no financial interest in the patents sufficient for him to have standing to pursue a § 256 claim.

Id. at 1326-27. By contrast, in this case, absent judicial intervention, Plaintiff holds title to the asserted patents. It does not need to prevail in any state action to acquire a financial interest in the patents. The Federal Circuit case law is clear that a litigant in Plaintiff’s position has standing to pursue claims under the patent laws. *See, e.g., Shum v. Intel Corp.*, 629 F.3d 1360, 1366 n. 7 (Fed. Cir. 2010) (“We reject Shum’s argument that the district court lacked subject matter jurisdiction based on Shum supposedly lacking a ‘concrete financial interest’ in the patents-in-suit. ... Shum is not like the plaintiff in *Larson*, who had already transferred title to the patents for which he sought correction of inventorship, and thus had no ownership interest in the patents-in-suit. ... Our conclusion that the plaintiff in *Larson* suffered no injury-in-fact sufficient to confer constitutional standing was based on that transfer of ownership rights. No such transfer or assignment has occurred here. Accordingly, Shum had, and continues to have, standing to pursue his correction of inventorship claims under 35 U.S.C. § 256.”).

The Court therefore holds that it need not decide whether Plaintiff owns the asserted patents.

C. The Court Has Dismissed All Claims Over Which It Has Original Jurisdiction

Section 1367(c)(3) gives the district court discretion to decline to exercise supplemental jurisdiction where it has “dismissed all claims over which it has original jurisdiction.” The Complaint alleges that this Court had subject matter jurisdiction based on the existence of a federal question. *See* 28 U.S.C. § 1331 (providing that “[t]he district courts shall have original jurisdiction of all civil actions arising under the Constitution, laws, or treaties of the United States.”) Section 1338(a) provides that “[t]he district courts shall have original jurisdiction of any civil action arising under any Act of Congress relating to patents...” 28 U.S.C. § 1338. Federal jurisdiction under Section 1338(a) extends “only to those cases in which a well-pleaded complaint establishes either that federal patent law creates the cause of action or that the plaintiff’s right to relief necessarily depends on resolution of a substantial question of federal patent law, in that patent law is a necessary element of one of the well-pleaded claims.” *Christianson v. Colt Indus. Operating Corp.*, 486 U.S. 800, 809 (1988).

Following this Court’s Order granting Defendant’s Motion for Summary Judgment, the sole remaining claim is Plaintiff’s claim for breach of contract. This claim is superficially related to patent law, in that the contract in dispute is a patent licensing agreement. This superficial relation to patent law is insufficient to confer original jurisdiction. Federal patent law does not “create” Plaintiff’s contract claim, state contract law does. Nor is patent law a “necessary element” of one of Plaintiff’s well-pleaded claims. Plaintiff has already taken the position that it can prevail on its contract claim even if Defendant’s accused products did not infringe the asserted patents. As such, the Court does not have original jurisdiction over Plaintiff’s sole remaining claim. The Court is therefore persuaded that the factual predicate identified in Section 1367(c)(3) is satisfied in this case.

B. The Gibbs Factors Weigh In Favor Of Dismissal

“Once [a Section 1367(c)] factual predicate is identified, the exercise of discretion ... still is informed by whether remanding the pendent state claims comports with the underlying objective of ‘most sensibly accommodat[ing]’ the values of ‘economy, convenience, fairness, and comity.’” *Executive Software N. Am., Inc. v. U.S. Dist. Court for Cent. Dist. of California*, 24 F.3d 1545, 1557 (9th Cir. 1994) *overruled on other grounds by California Dep’t of Water Res. v. Powerex Corp.*, 533 F.3d 1087 (9th Cir. 2008) (citing multiple cases). The Court turns to these four factors.

1. Economy

The interest in judicial economy does not weight against dismissal. It is true that the Court has developed familiarity with the facts of this dispute. Those facts are not, however, unduly complex. As to the breach of contract claim, it does not appear that many factual issues remain in dispute. As such, it would not require extensive duplication of this Court’s effort for a state court to familiarize itself with the facts underlying the contract claim.

As to the legal issues related to the contract claim, Plaintiff contends that the Court has already made a number of key determinations. The Court disagrees. The issues the Court has decided in previous orders have had little to do with the breach of contract claim. The only order that pertained to the agreement was the Court’s Order re: Plaintiff’s Motion for Partial Summary Judgment on Defendant’s Counterclaim (DE 133.) In that order, the Court found that the agreement could be enforced to bar Defendant from challenging the validity of the asserted patents. The issues decided in that order were primarily related to federal patent law and policy, not state contract law. The legal issues presented by the breach of contract dispute are unlikely to require duplicative research or analysis.

2. Convenience

The convenience of the parties does not weigh against dismissal. Both parties are California residents. Litigating the breach of contract claim in a state court is unlikely to prove inconvenient.

3. Fairness

Neither party has raised any compelling reason dismissal would be unfair. The Court notes, without deciding, that a dismissal without prejudice is not likely to preclude Plaintiff and Defendant from raising claims in state court.

4. Comity

The interest in comity strongly favors dismissal of the remaining state-law claim. Defendant argues, and the Court agrees, that resolution of the breach of contract claim may involve complex issues of California law. For instance, Plaintiff asserts that Defendant breached the 2009 agreement, and may be liable for damages in contract, by asserting invalidity as an affirmative defense in this action. It is unclear whether a California court would permit Plaintiff to recover based on this theory of breach or whether, instead, some state privilege protects Defendant’s conduct. Even if Plaintiff’s theory is viable under California law, it may be unclear how Plaintiff’s damages are to be calculated. Can Plaintiff’s litigation expenses be considered in calculating Plaintiff’s damages? Are Plaintiff’s damages unduly speculative? These and several other questions involve complex issues of California contract law. As such, the Court believes a California court would be better suited to decide them.

IV. CONCLUSION

For the above reasons, the Court **GRANTS** Defendant's Motion to Dismiss. The Court dismisses Plaintiff's breach of contract claim without prejudice.

IT IS SO ORDERED.

_____ : _____

Initials of Preparer



US007597393B1

(12) **United States Patent**
Tuccinardi et al.

(10) **Patent No.:** **US 7,597,393 B1**
(45) **Date of Patent:** **Oct. 6, 2009**

(54) **HEADREST/HEAD RESTRAINT HAVING AN INTEGRATED VIDEO SCREEN**

3,258,511 A 6/1966 McGregor
3,615,188 A 10/1971 Buxton

(76) Inventors: **Eugene M. Tuccinardi**, 28296 Corte Ocaso, Temecula, CA (US) 92592; **Ernesto R. Haack**, 26935 Spring St., Perris, CA (US) 92570; **Robert Murphy**, Lake Elsinore, CA (US); **Shanna Murphy**, legal representative, 16450 Pinyon St., Lake Elsinore, CA (US) 92530; **Frank Barrese**, 30170 Corte Coehlo, Temecula, CA (US) 92591; **Roel C. Espina**, 106 W. Pennsylvania Ave., # 912, Redlands, CA (US) 92374; **Jon A. Molo**, 31122 Dog Leg Cir., Temecula, CA (US) 92591; **Theo Zoetemelk**, 6408 Heather Wood Dr., Riverside, CA (US) 92509

(Continued)

FOREIGN PATENT DOCUMENTS

DE 3637772 A1 5/1988

(Continued)

OTHER PUBLICATIONS

Office Action of Aug. 2, 2006 for U.S. Appl. No. 11/415,696.

(Continued)

Primary Examiner—Sarah McPartlin

(74) *Attorney, Agent, or Firm*—Knobbe, Martens, Olson & Bear, LLP

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 487 days.

(57)

ABSTRACT

(21) Appl. No.: 10/819,341

(22) Filed: Apr. 5, 2004

Related U.S. Application Data

(60) Provisional application No. 60/460,841, filed on Apr. 4, 2003.

(51) **Int. Cl.**
A47C 7/42 (2006.01)

(52) **U.S. Cl.** 297/217.3; 297/188.04

(58) **Field of Classification Search** 297/217.3,
297/188.4, 188.07

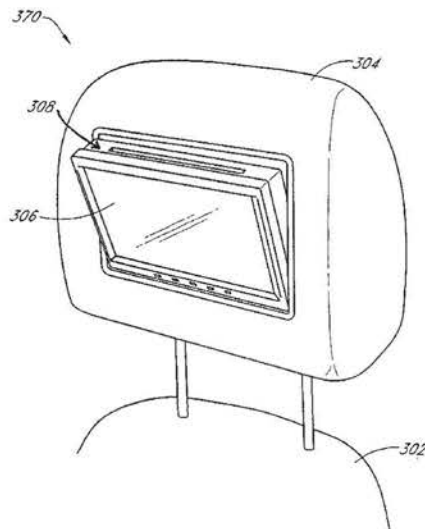
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,004,815 A 10/1961 O'Kain et al.

15 Claims, 25 Drawing Sheets



US 7,597,393 B1

Page 2

U.S. PATENT DOCUMENTS

4,525,746 A 6/1985 Mangold et al.
 4,584,603 A 4/1986 Harrison
 4,635,110 A 1/1987 Weinblatt
 4,647,980 A 3/1987 Steventon et al.
 4,681,366 A 7/1987 Lobanoff
 4,726,621 A 2/1988 Muller
 4,756,528 A 7/1988 Umashankar
 4,776,739 A 10/1988 Hamman
 4,788,588 A 11/1988 Tomita
 4,843,477 A 6/1989 Mizutani et al.
 4,860,415 A 8/1989 Witzke
 4,866,515 A 9/1989 Tagawa et al.
 RE33,423 E 11/1990 Lobanoff
 4,983,951 A 1/1991 Igarashi et al.
 5,168,615 A 12/1992 Koa
 5,267,775 A 12/1993 Nguyen
 5,292,174 A 3/1994 Ohnuma
 5,293,244 A 3/1994 Kawaguchi
 5,295,732 A 3/1994 Boisset
 5,311,302 A 5/1994 Berry et al.
 5,333,416 A 8/1994 Harris et al.
 5,359,349 A 10/1994 Jambor et al.
 5,507,556 A 4/1996 Dixon
 5,529,265 A 6/1996 Sakurai
 5,555,466 A 9/1996 Scribner et al.
 5,640,297 A 6/1997 Labaze
 5,713,633 A 2/1998 Lu
 D398,921 S 9/1998 Rosen
 5,842,715 A 12/1998 Jones
 5,946,055 A 8/1999 Rosen
 5,953,784 A 9/1999 Suzuki
 6,024,027 A 2/2000 Esmaili
 6,055,478 A * 4/2000 Heron 701/213
 D434,400 S 11/2000 Rosen
 6,199,948 B1 3/2001 Bush et al.
 6,216,927 B1 4/2001 Meritt
 6,250,967 B1 6/2001 Chu
 D448,009 S 9/2001 Lavelle
 6,292,236 B1 9/2001 Rosen
 6,305,046 B1 10/2001 Kingry
 6,339,455 B1 1/2002 Allan et al.
 6,394,551 B1 5/2002 Beukema
 6,406,334 B2 6/2002 Chu
 6,409,242 B1 6/2002 Chang
 6,450,571 B1 9/2002 Canni
 6,480,243 B2 11/2002 Yamamoto
 6,522,368 B1 2/2003 Tuccinardi et al.
 6,669,285 B1 12/2003 Park et al.
 6,739,654 B1 5/2004 Shen et al.
 6,750,599 B2 6/2004 Tajima
 6,755,491 B2 6/2004 McElheney
 6,762,929 B2 * 7/2004 Sawyer 361/681
 6,786,547 B1 9/2004 Chu

6,871,356 B2 3/2005 Chang
 6,883,870 B2 4/2005 Jost
 6,899,365 B2 5/2005 Lavelle
 6,986,190 B2 1/2006 Jost
 7,036,879 B2 5/2006 Chang
 7,038,581 B2 * 5/2006 Kendall et al. 340/506
 7,040,697 B1 5/2006 Tuccinardi et al.
 7,044,546 B2 * 5/2006 Chang 297/217.3
 7,188,895 B1 3/2007 Tuccinardi
 7,245,274 B2 7/2007 Schedivy
 7,407,227 B1 8/2008 Tuccinardi
 2001/0008266 A1 7/2001 Lambert
 2003/0025367 A1 2/2003 Boudinot
 2004/0007906 A1 1/2004 Park et al.
 2004/0032543 A1 2/2004 Chang
 2004/0160096 A1 8/2004 Boudinot
 2005/0099042 A1 * 5/2005 Vitito 297/217.3
 2005/0242638 A1 * 11/2005 Vitito 297/217.3
 2007/0001492 A1 * 1/2007 Chang 297/217.3
 2007/0102973 A1 * 5/2007 Vitito 297/217.3

FOREIGN PATENT DOCUMENTS

DE 19601582 A1 1/1996
 FR 2764563 A1 12/1998
 JP 01094048 A 4/1989
 WO WO 02/074577 A1 9/2002

OTHER PUBLICATIONS

Response to Office Action for Aug. 2, 2006 for U.S. Appl. No. 11/415,696.
 Final Office Action of Mar. 13, 2007 for U.S. Appl. No. 11/415,696.
 RCE & Response to Final Office Action of Mar. 13, 2007 for U.S. Appl. No. 11/415,696.
 Office Action of Aug. 31, 2007 for U.S. Appl. No. 11/415,696.
 Response to Office Action of Aug. 31, 2007 for U.S. Appl. No. 11/415,696.
 Office Action of Jan. 31, 2007 for U.S. Appl. No. 11/415,918.
 Response to Office Action of Jan. 31, 2007 for U.S. Appl. No. 11/415,918.
 Final Office Action of Jul. 30, 2007 for U.S. Appl. No. 11/415,918.
 RCE and Response to Final Office Action of Jul. 30, 2007 for U.S. Appl. No. 11/415,918.
 Restriction Requirement of Jul. 19, 2004 for U.S. Appl. No. 10/395,870.
 Response to Restriction Requirement of Jul. 19, 2004 for U.S. Appl. No. 10/395,870.
 Office Action of Sep. 27, 2004 for U.S. Appl. No. 10/395,870.
 Response to Office Action of Sep. 27, 2004 for U.S. Appl. No. 10/395,870.
 Final Office Action of May 3, 2005 for U.S. Appl. No. 10/395,870.
 RCE & Response to Final Office Action of May 3, 2005 for U.S. Appl. No. 10/395,870.
 Notice of Allowance of Dec. 6, 2005 for U.S. Appl. No. 10/395,870.

* cited by examiner

U.S. Patent

Oct. 6, 2009

Sheet 1 of 25

US 7,597,393 B1

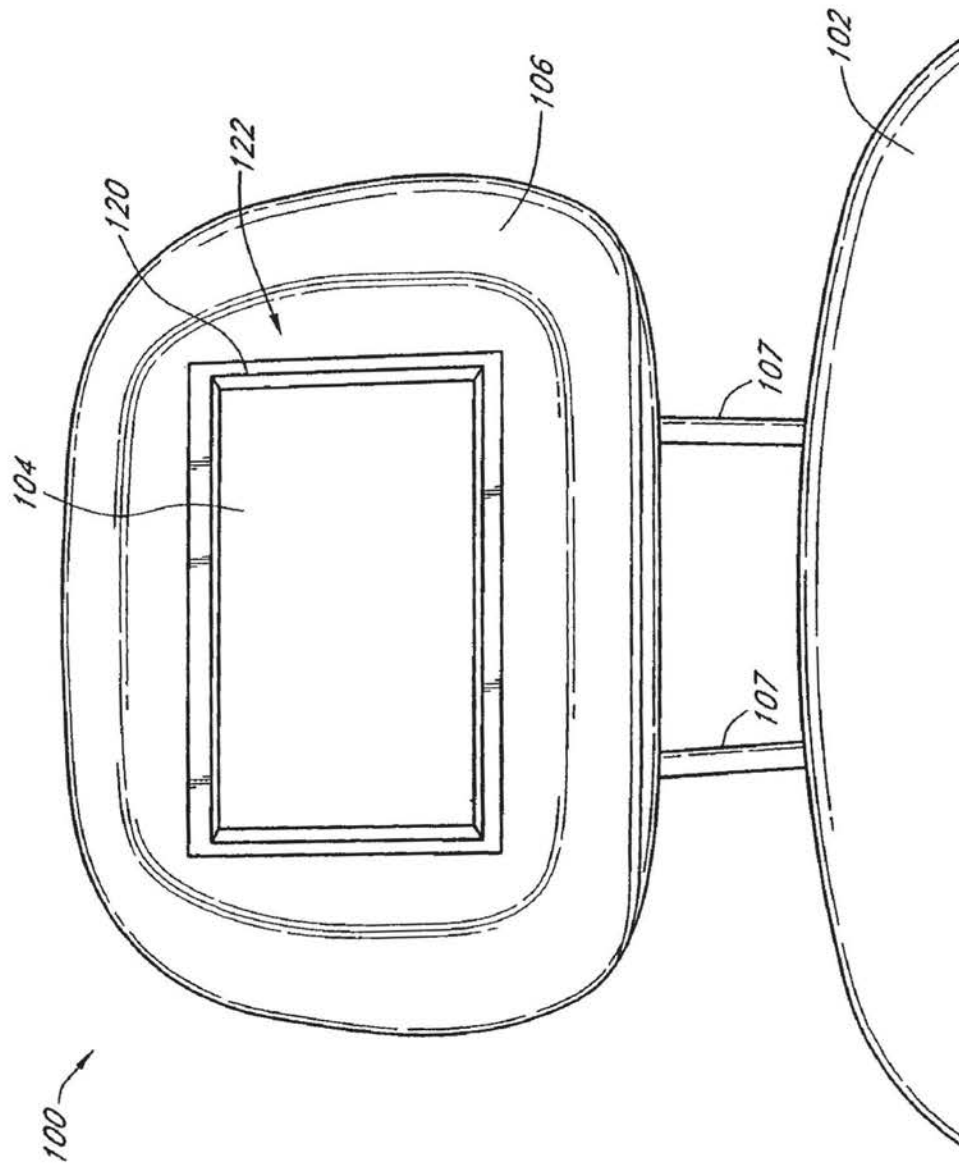


FIG. 1A

U.S. Patent

Oct. 6, 2009

Sheet 2 of 25

US 7,597,393 B1

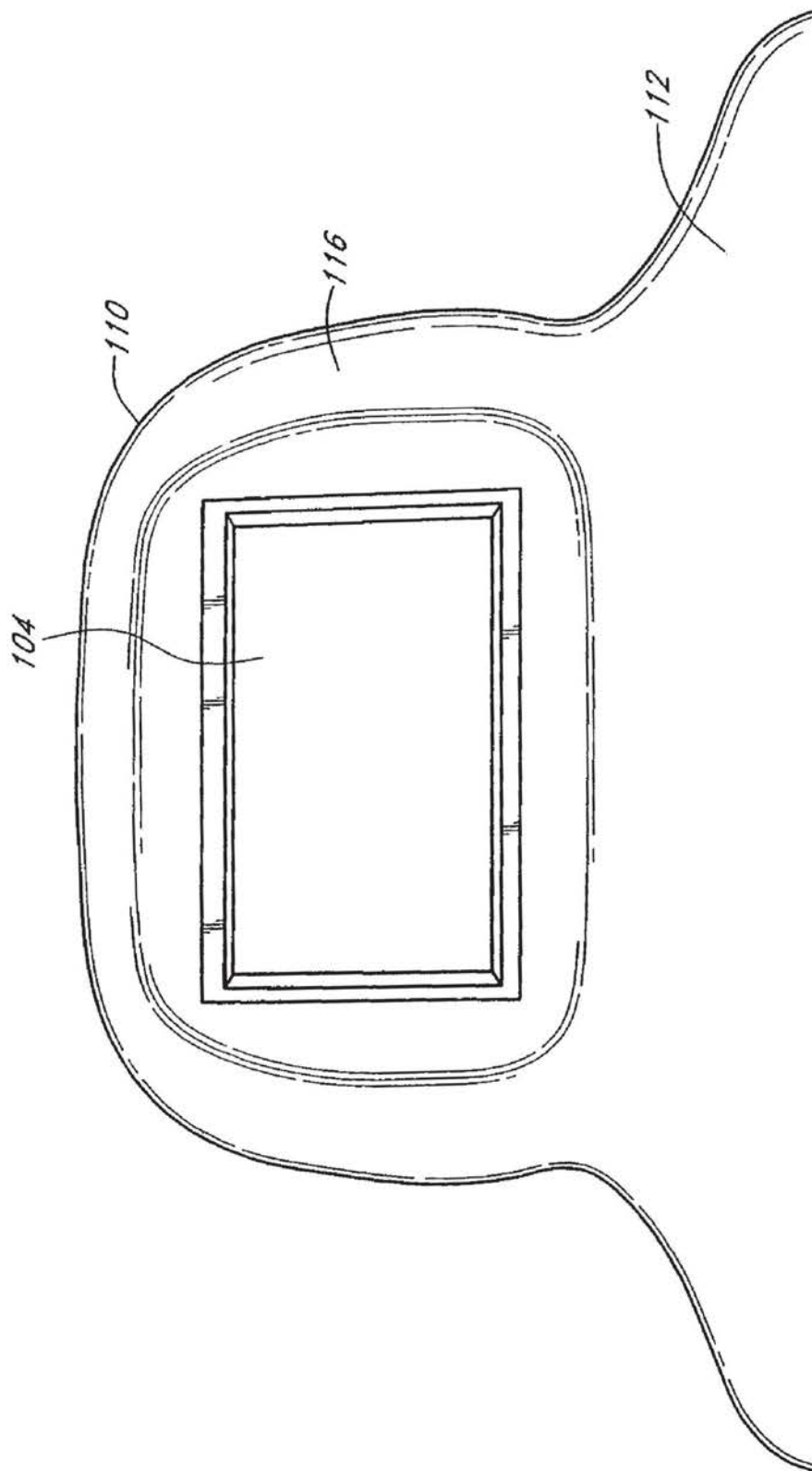


FIG. 1B

U.S. Patent

Oct. 6, 2009

Sheet 3 of 25

US 7,597,393 B1

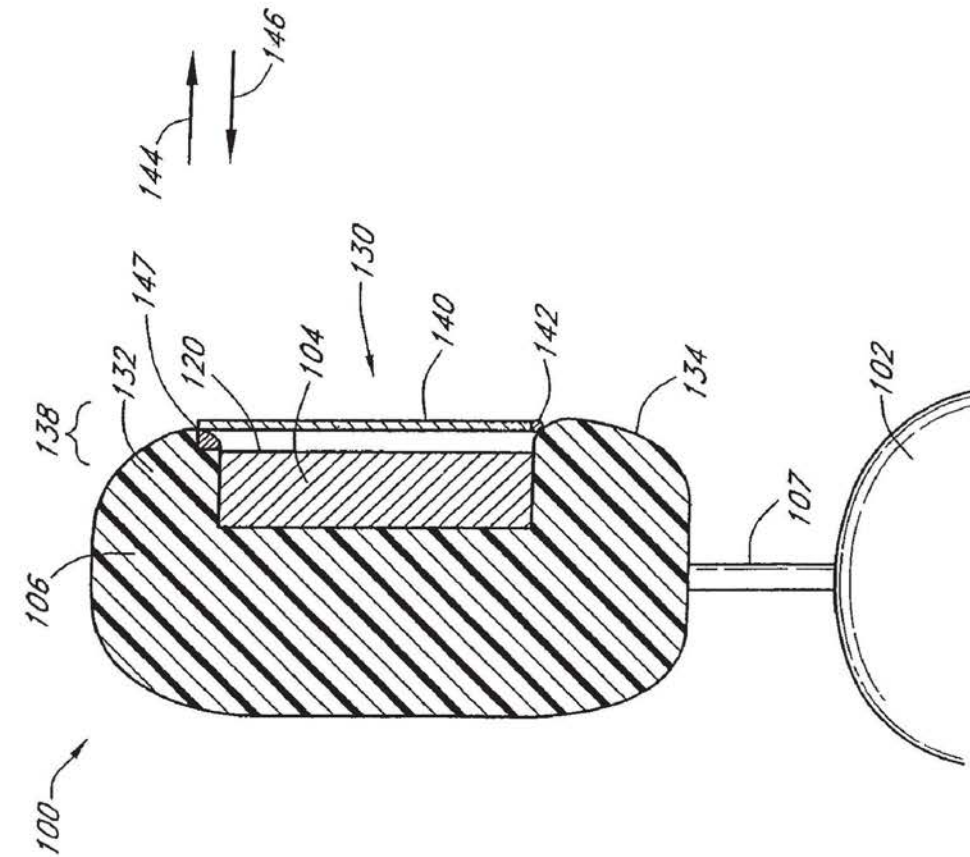


FIG. 3A

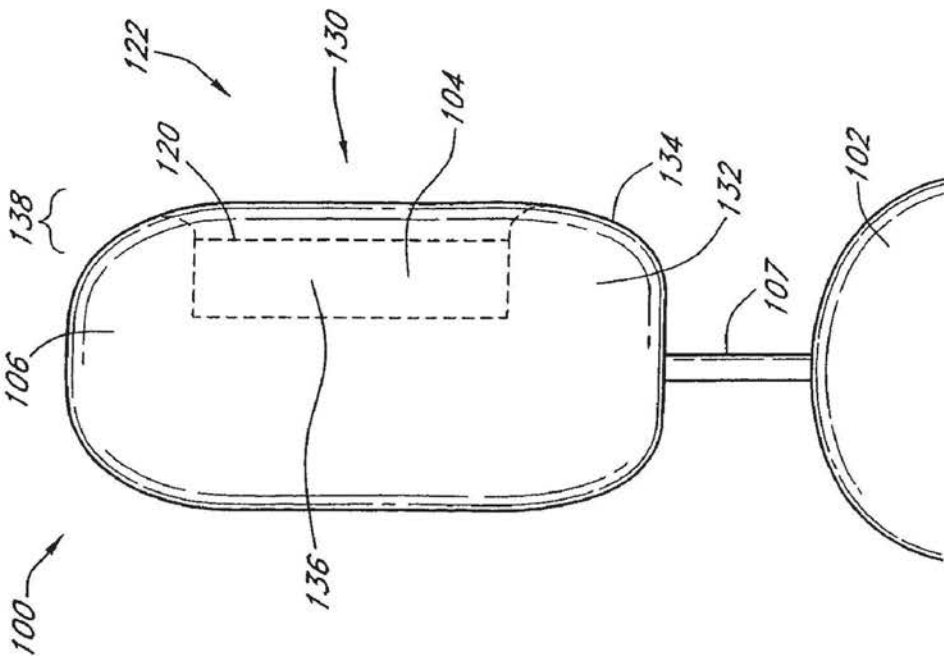
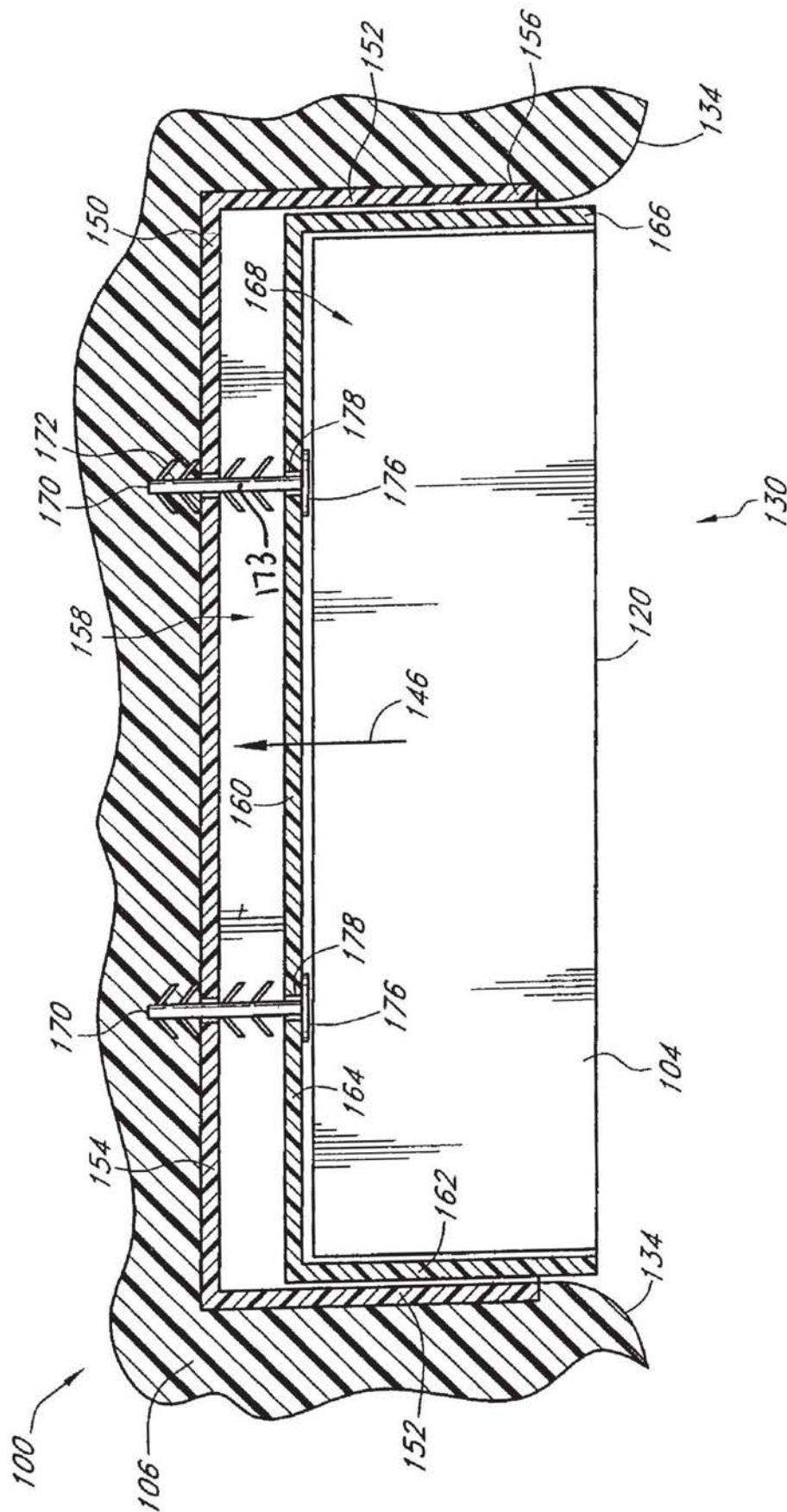
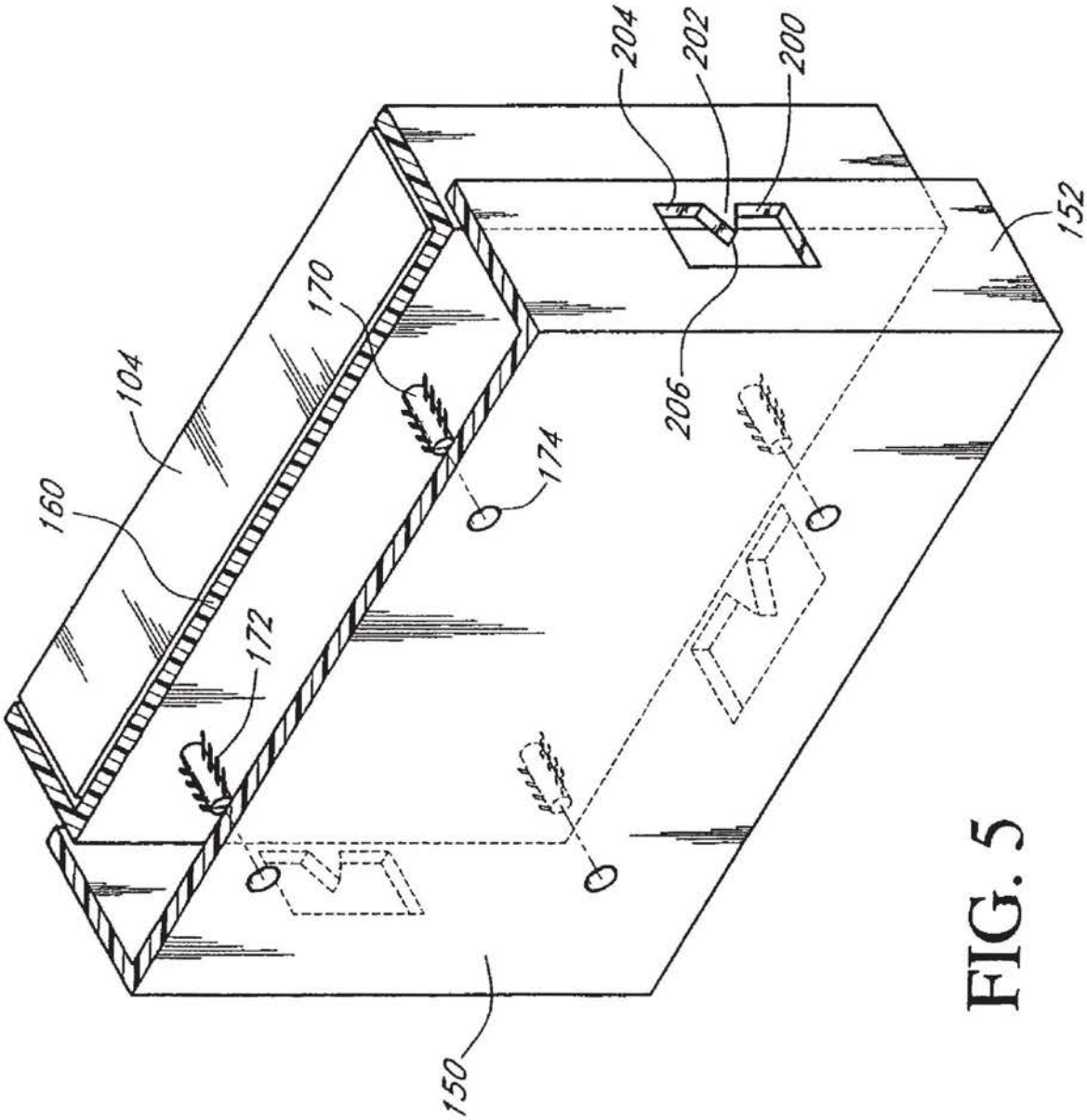


FIG. 2





U.S. Patent

Oct. 6, 2009

Sheet 7 of 25

US 7,597,393 B1

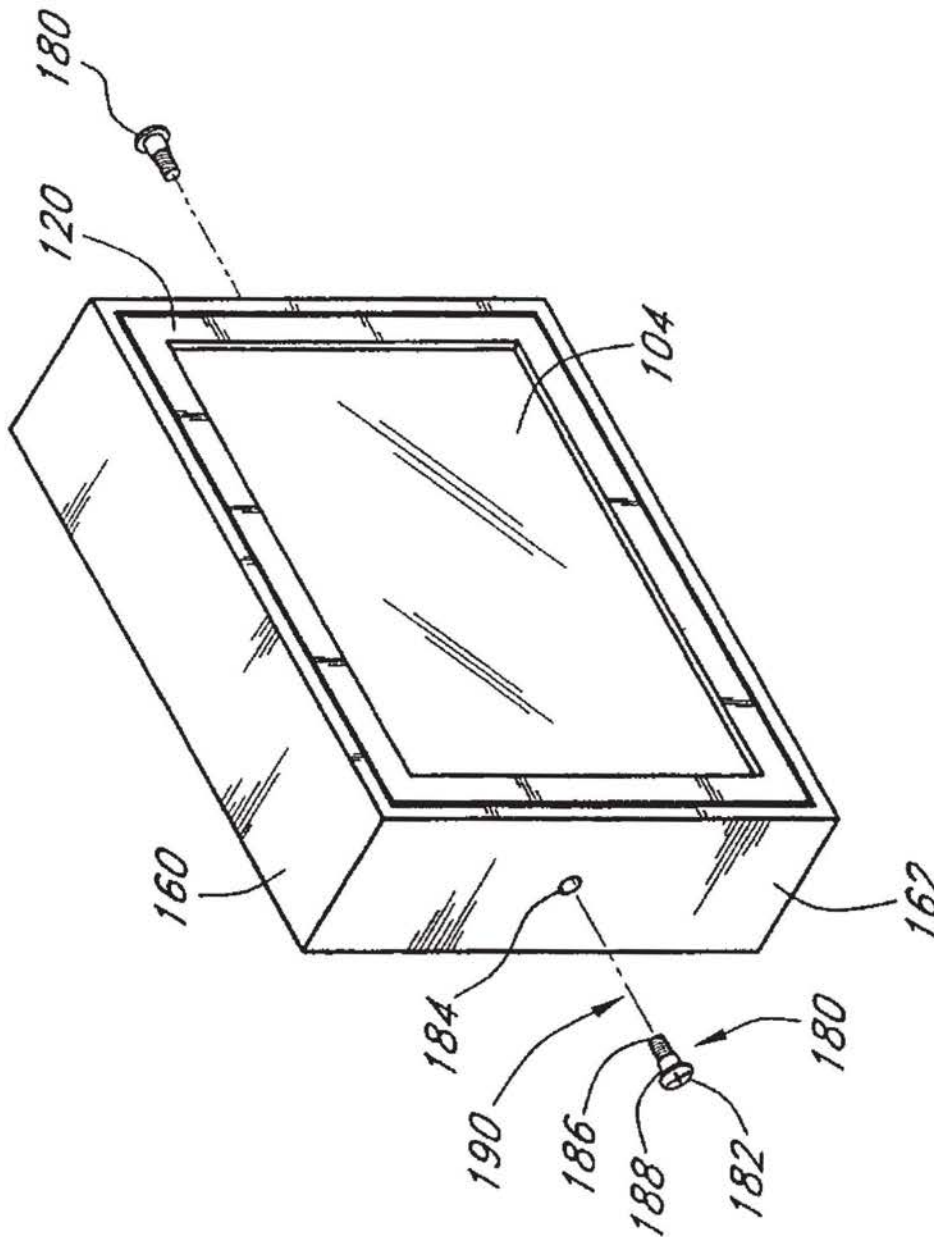


FIG. 6A

U.S. Patent

Oct. 6, 2009

Sheet 8 of 25

US 7,597,393 B1

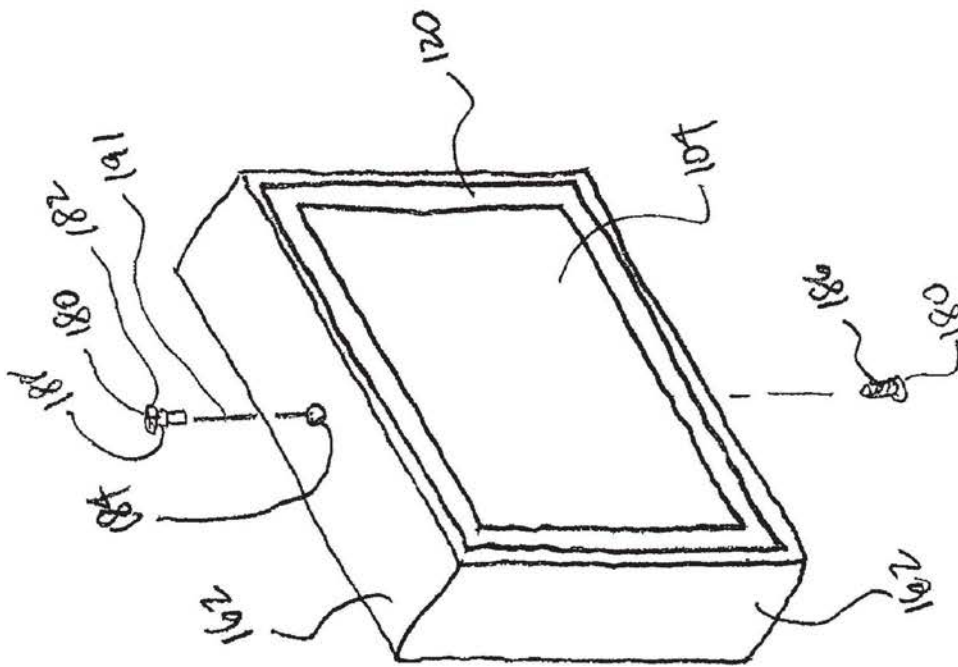


FIG. 6B

U.S. Patent

Oct. 6, 2009

Sheet 10 of 25

US 7,597,393 B1

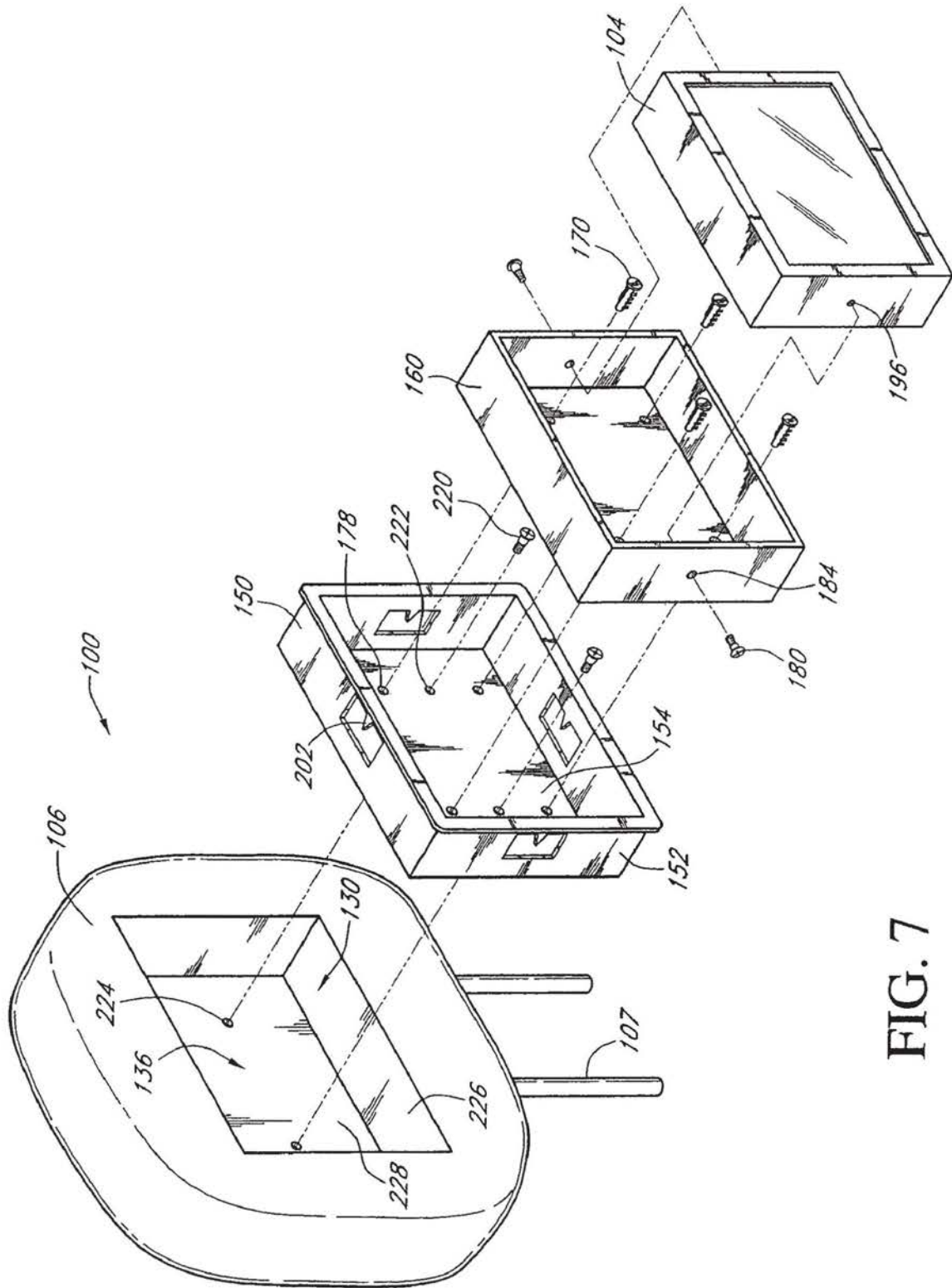


FIG. 7

U.S. Patent

Oct. 6, 2009

Sheet 11 of 25

US 7,597,393 B1

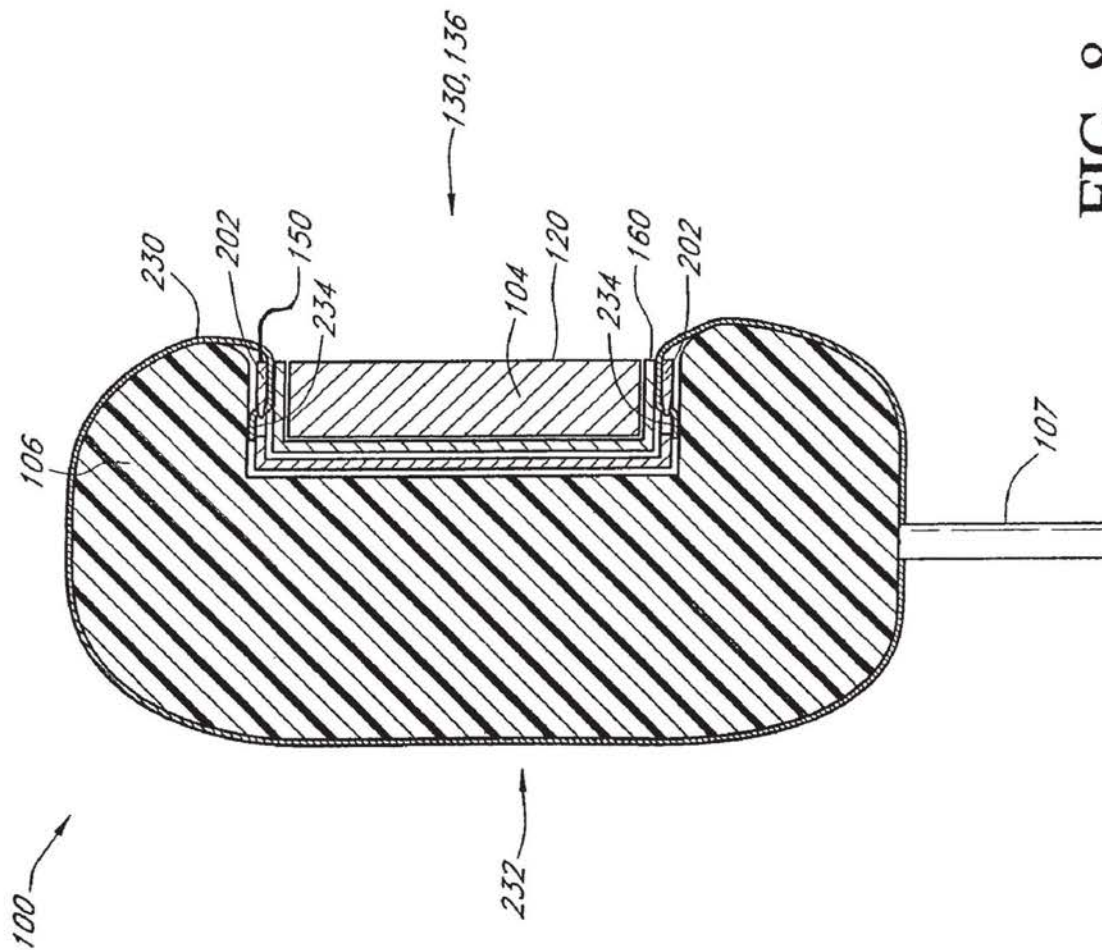


FIG. 8

U.S. Patent

Oct. 6, 2009

Sheet 12 of 25

US 7,597,393 B1

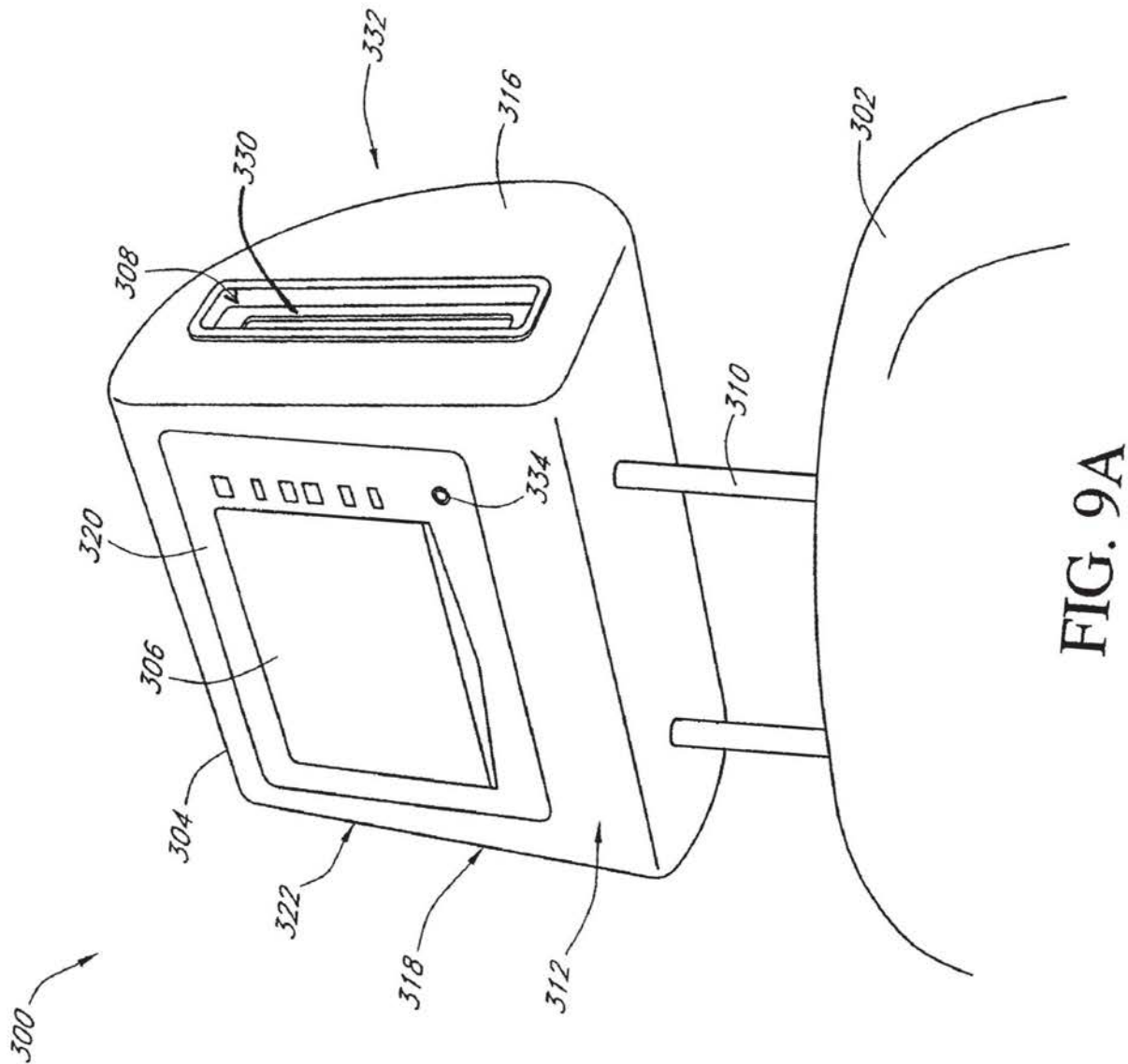


FIG. 9A

U.S. Patent

Oct. 6, 2009

Sheet 13 of 25

US 7,597,393 B1

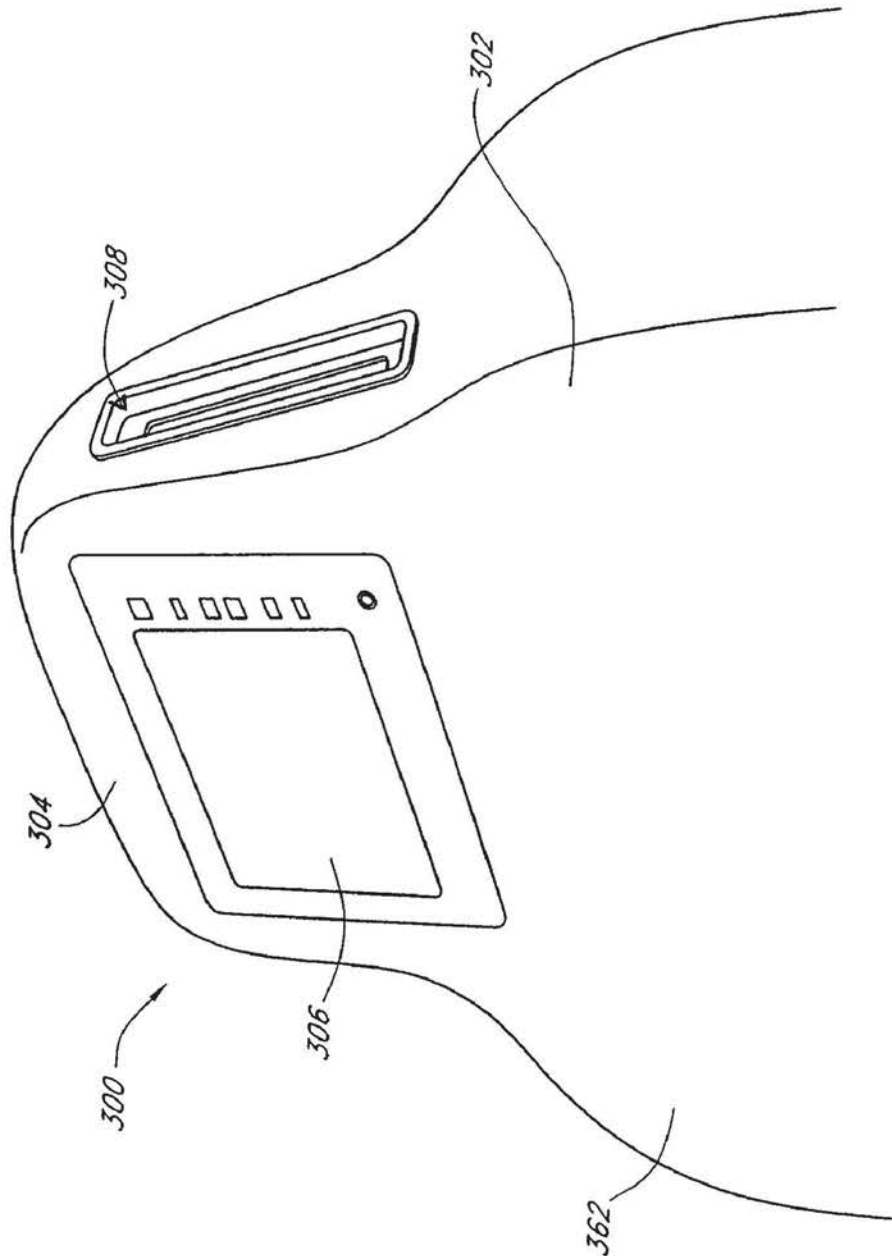


FIG. 9B

U.S. Patent

Oct. 6, 2009

Sheet 14 of 25

US 7,597,393 B1

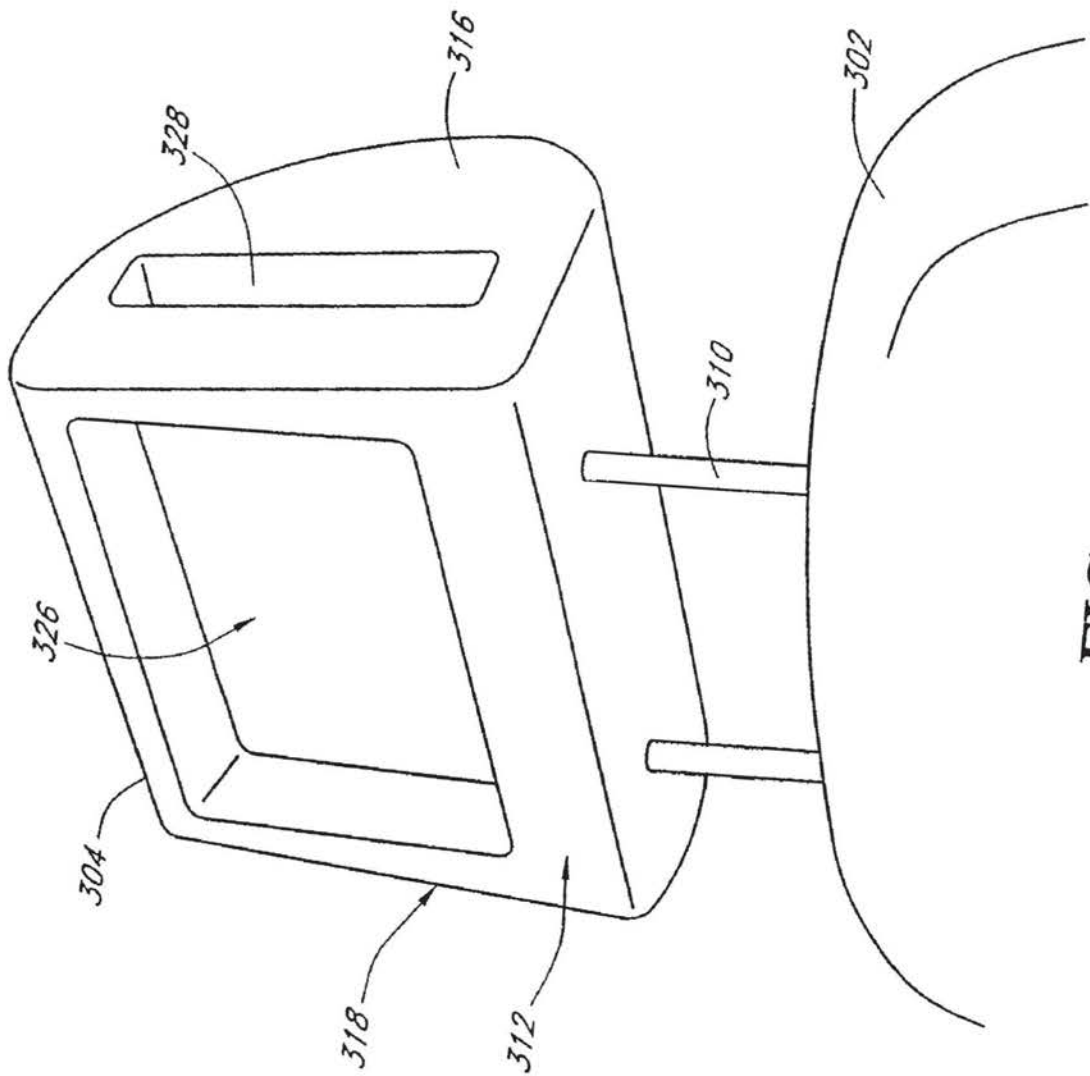


FIG. 9C

U.S. Patent

Oct. 6, 2009

Sheet 15 of 25

US 7,597,393 B1

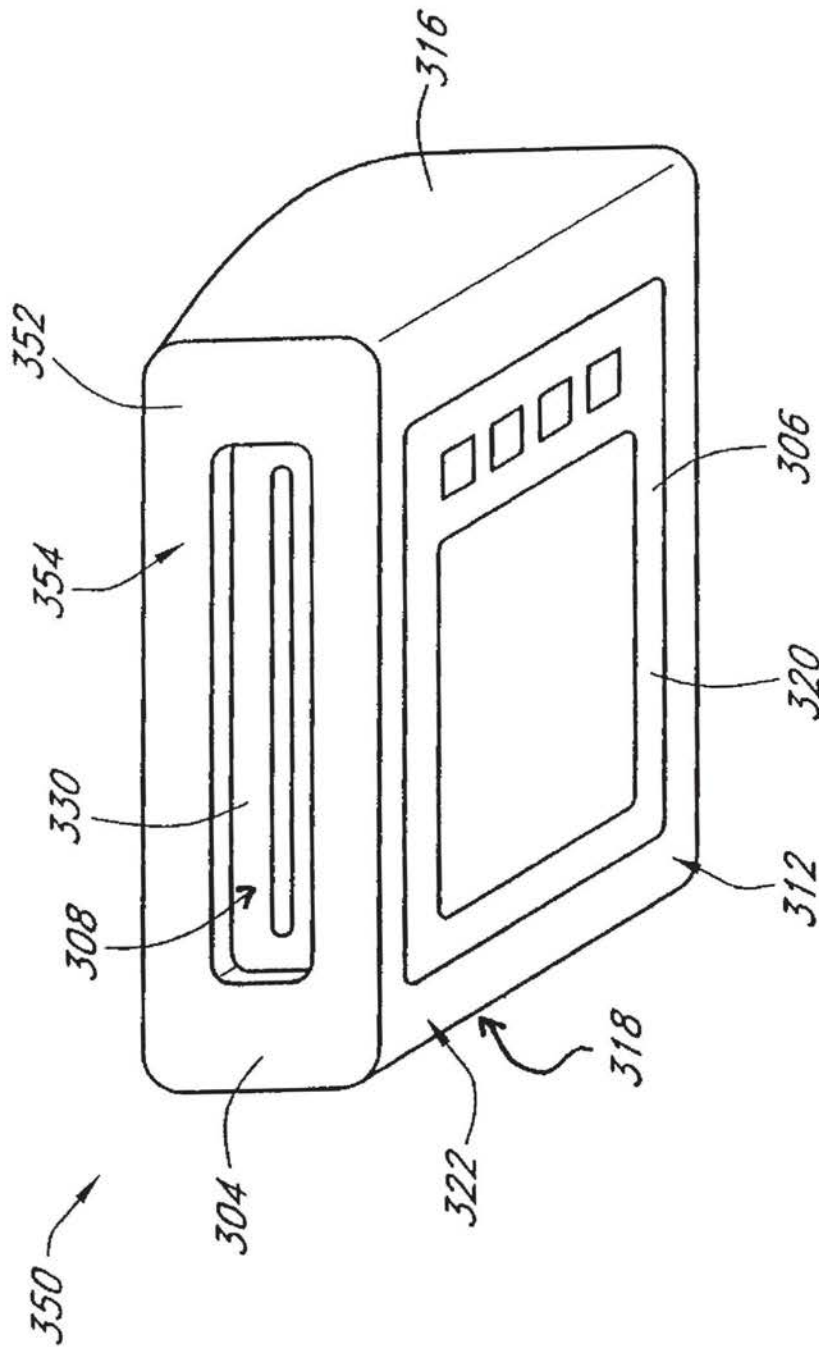


FIG. 10

U.S. Patent

Oct. 6, 2009

Sheet 16 of 25

US 7,597,393 B1

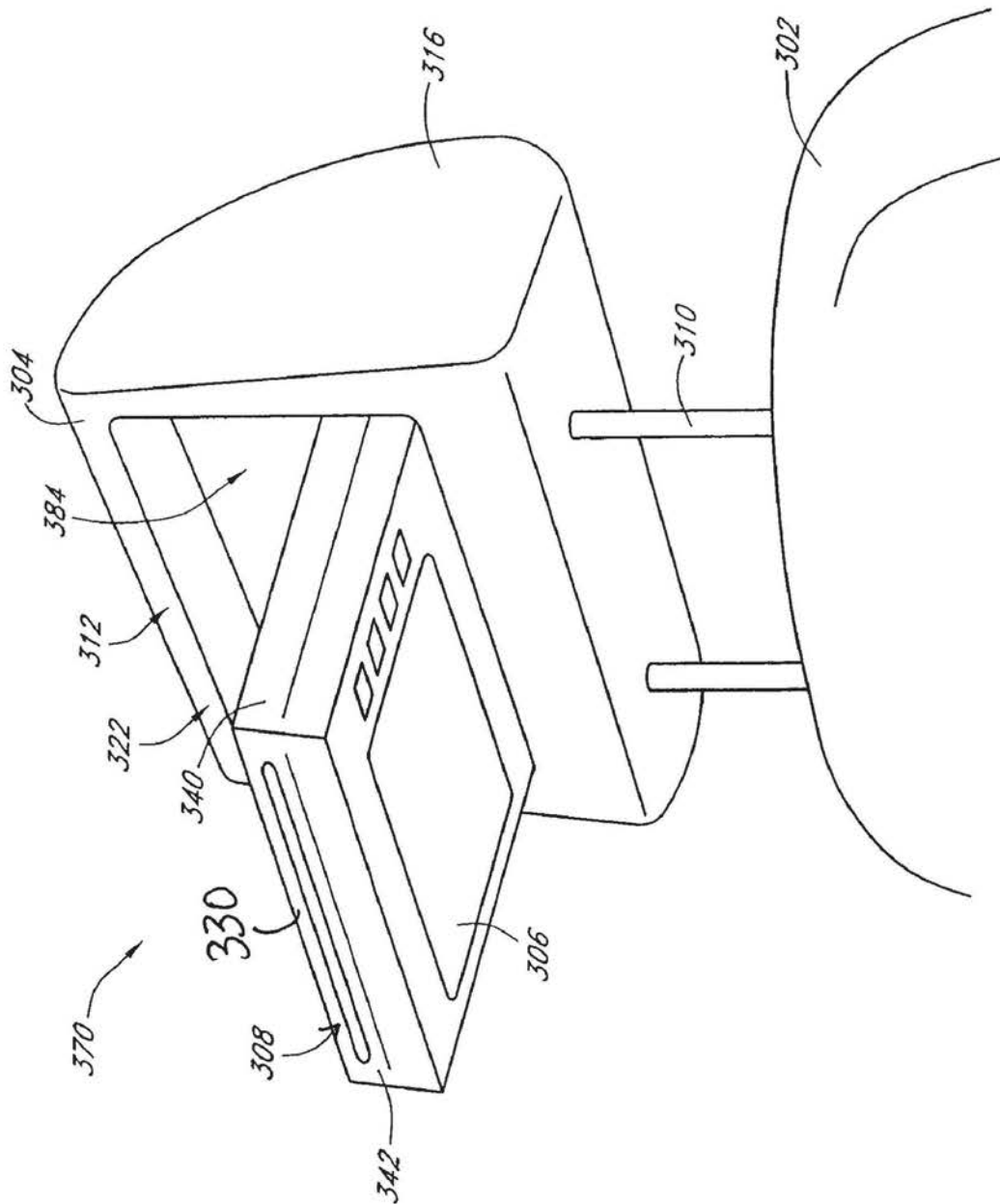


FIG. 11A

U.S. Patent

Oct. 6, 2009

Sheet 17 of 25

US 7,597,393 B1

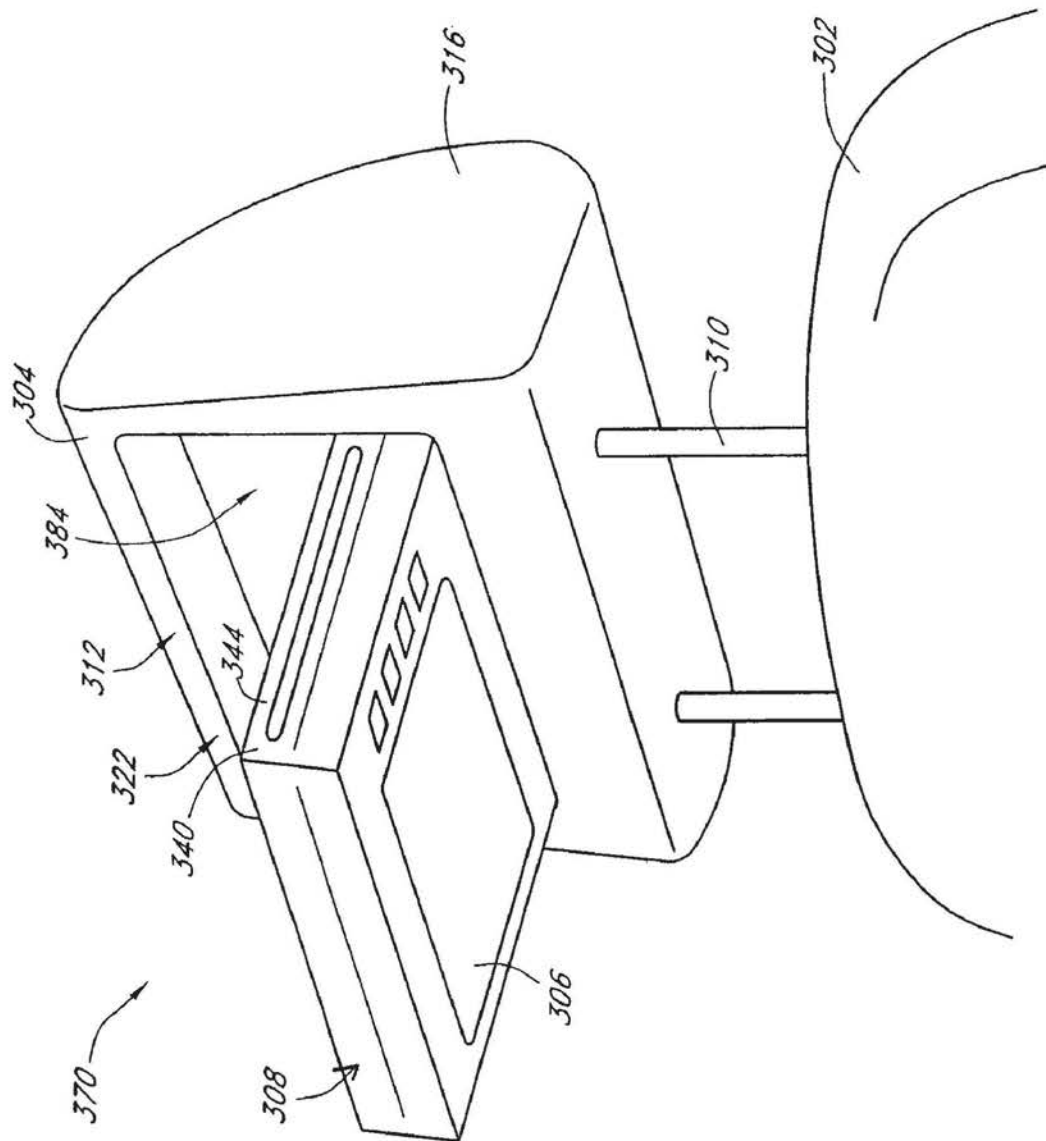


FIG. 11B

US 7,597,393 B1

U.S. Patent

Oct. 6, 2009

Sheet 18 of 25

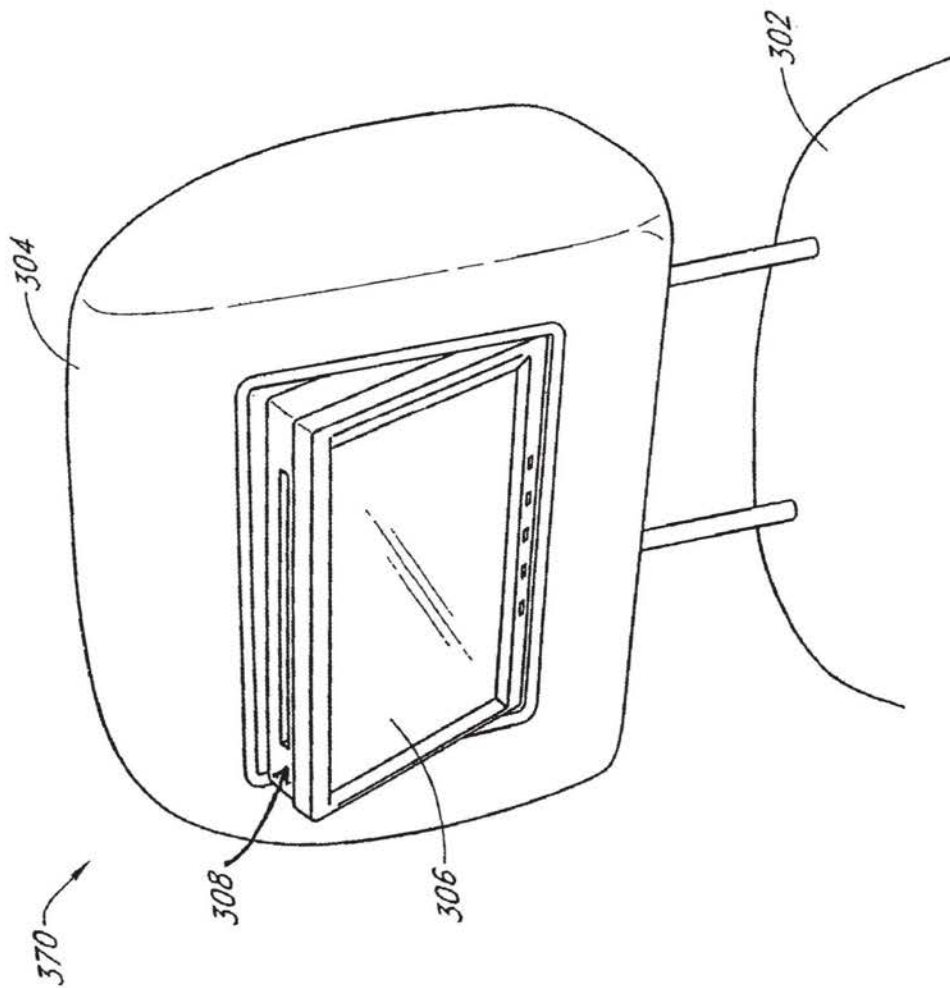
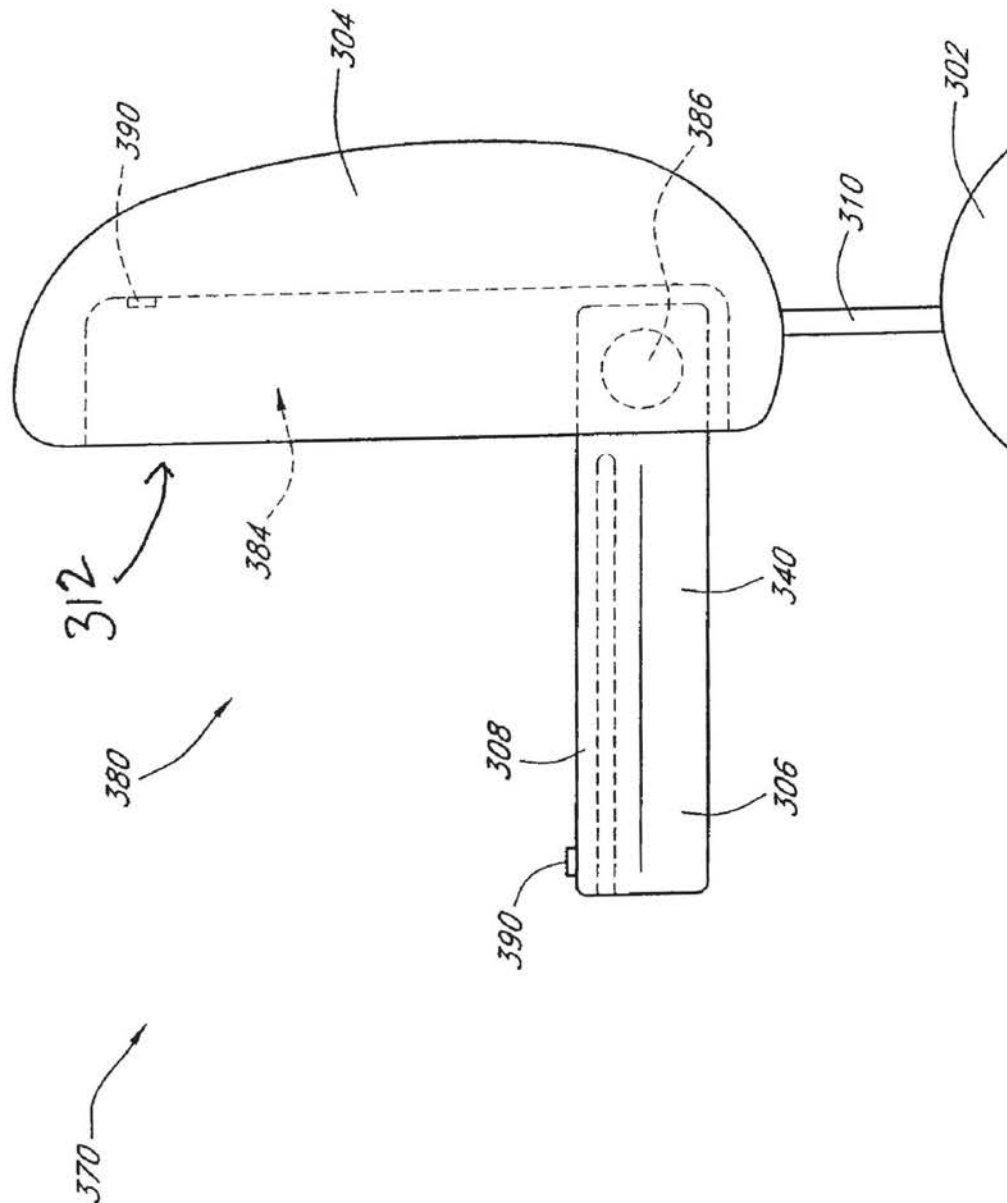


FIG. 11C



U.S. Patent

Oct. 6, 2009

Sheet 20 of 25

US 7,597,393 B1

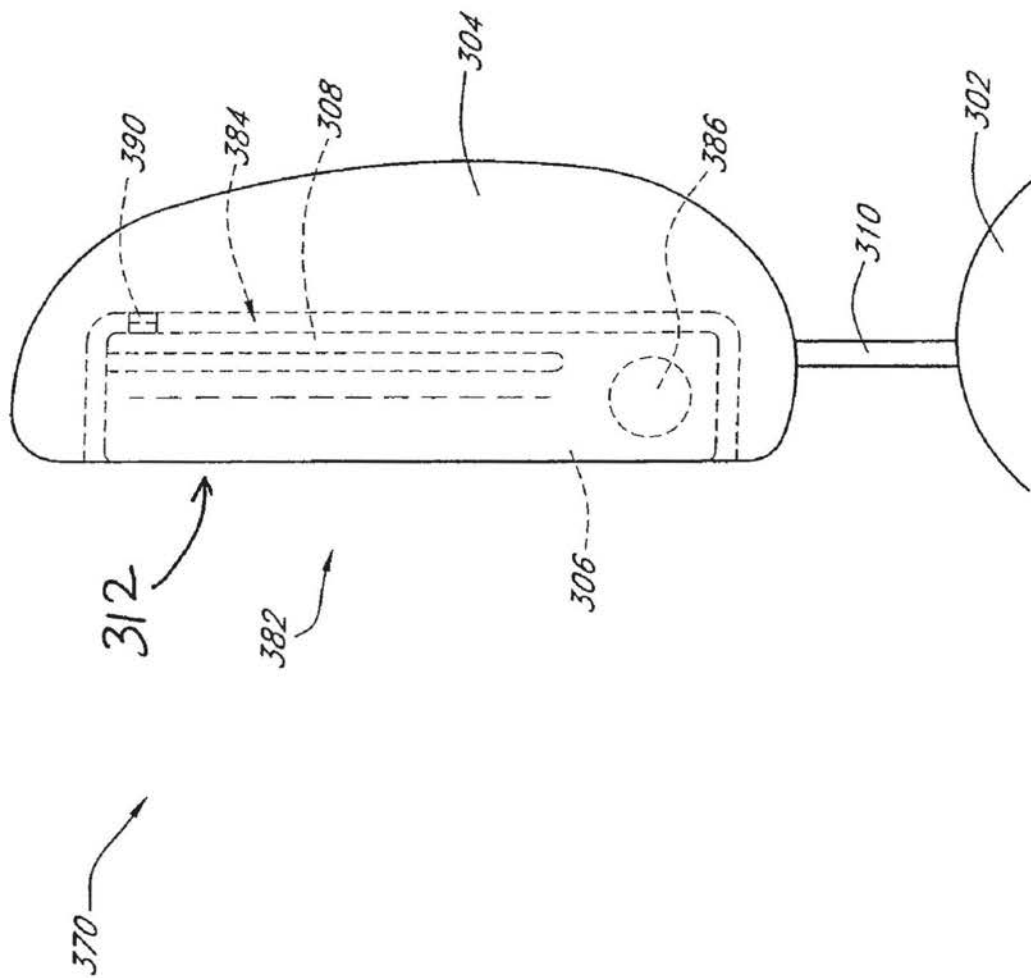


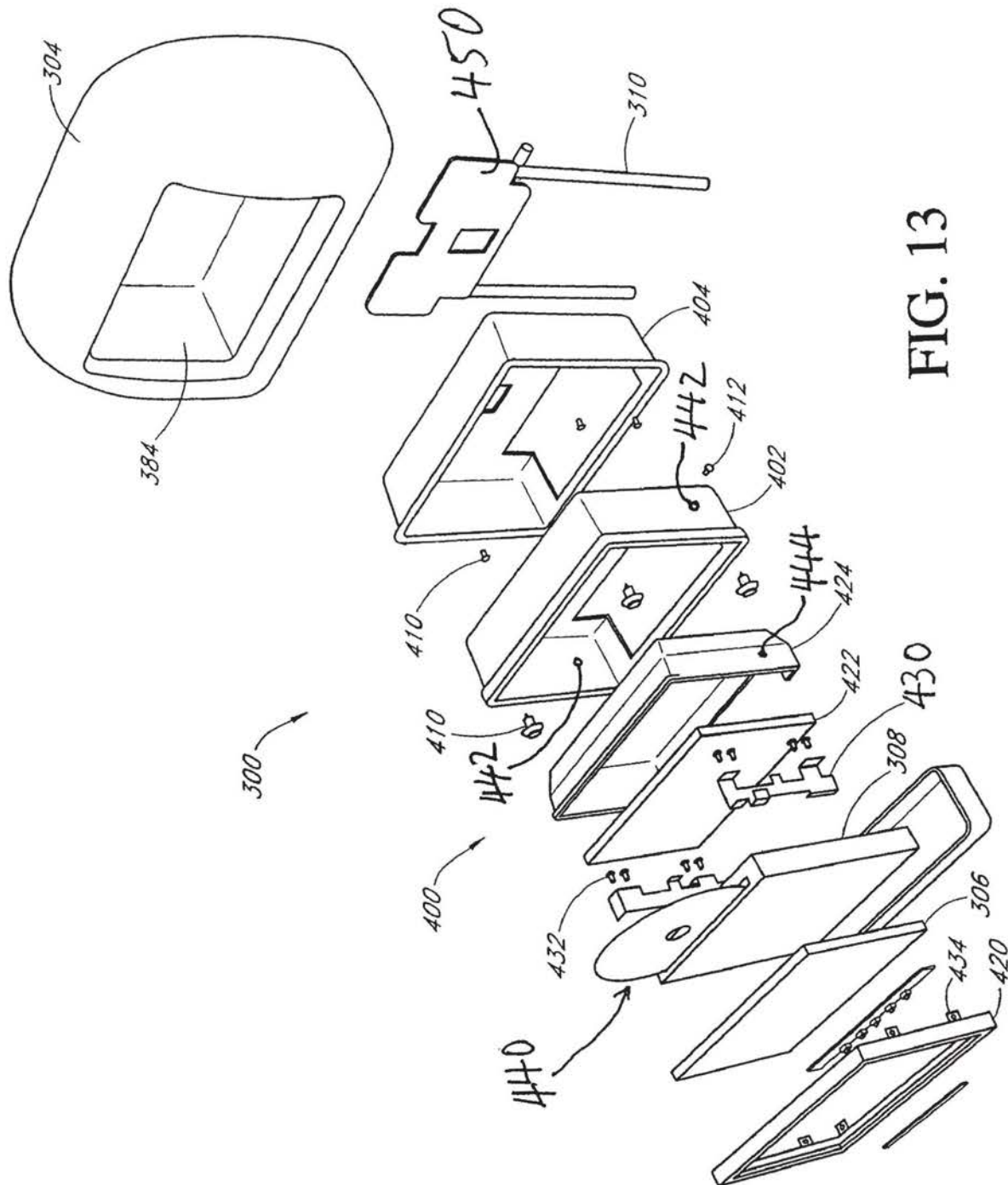
FIG. 12B

U.S. Patent

Oct. 6, 2009

Sheet 21 of 25

US 7,597,393 B1

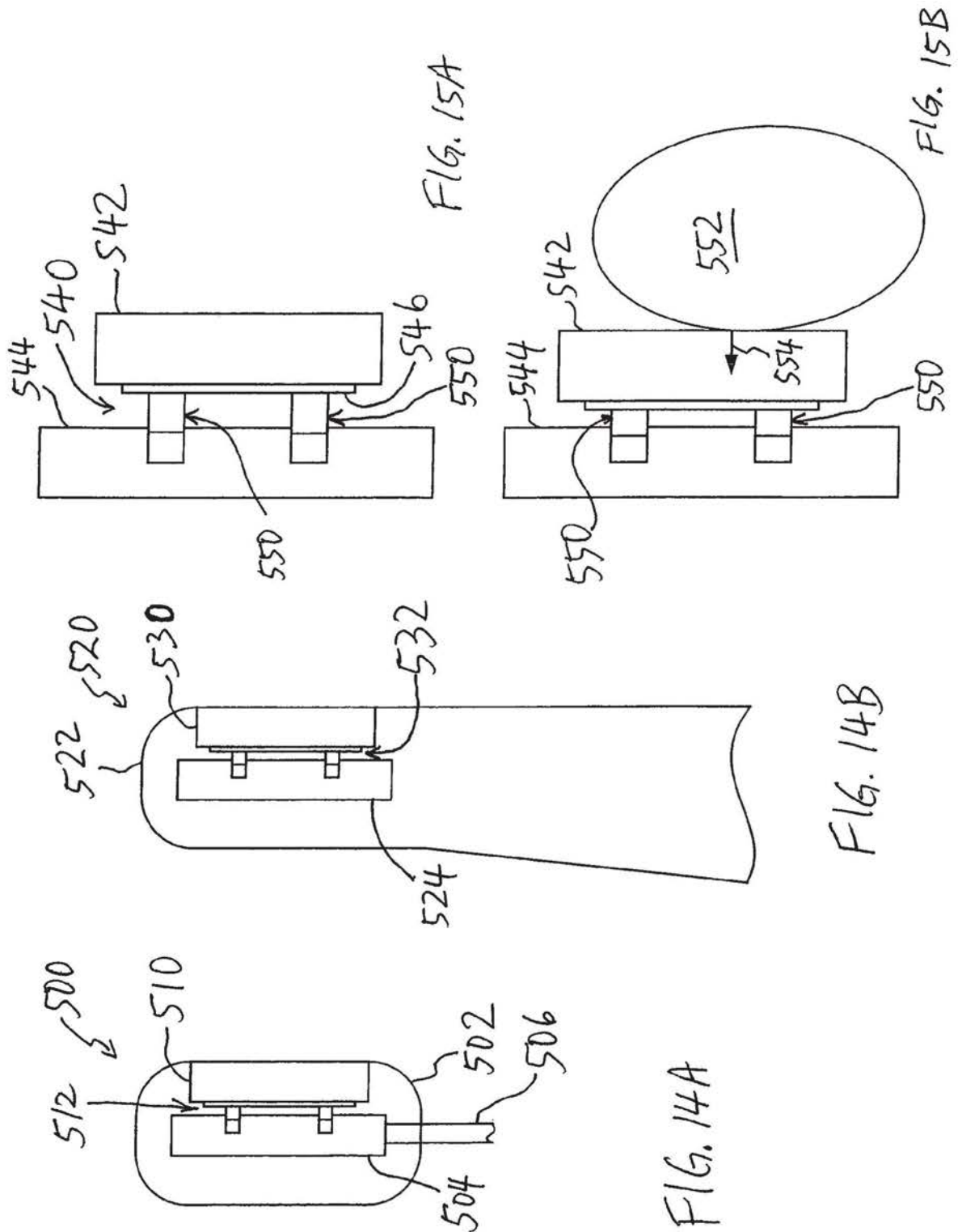


U.S. Patent

Oct. 6, 2009

Sheet 22 of 25

US 7,597,393 B1



U.S. Patent

Oct. 6, 2009

Sheet 23 of 25

US 7,597,393 B1

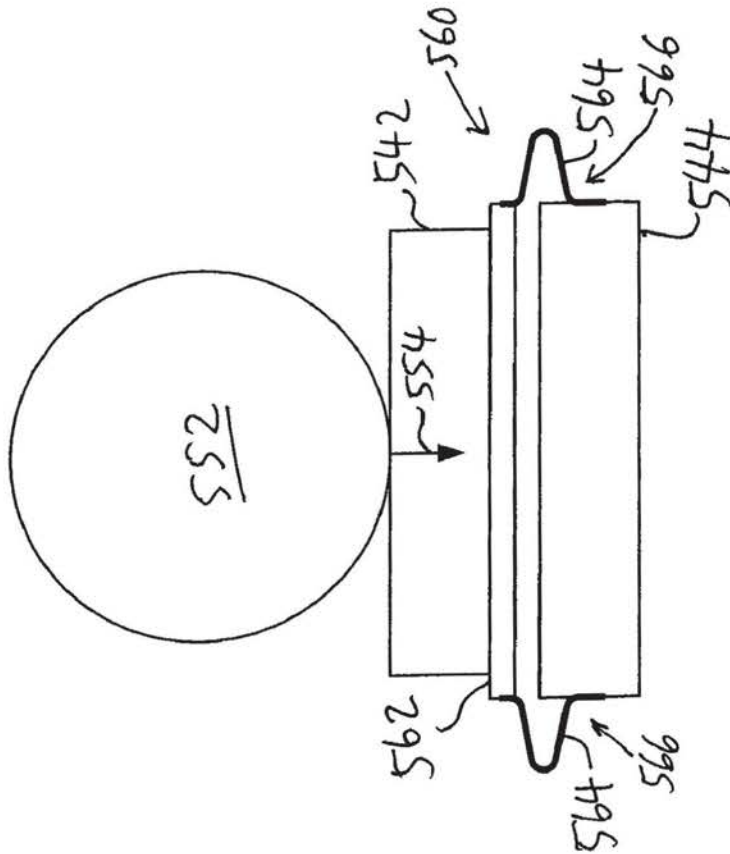


FIG. 16B

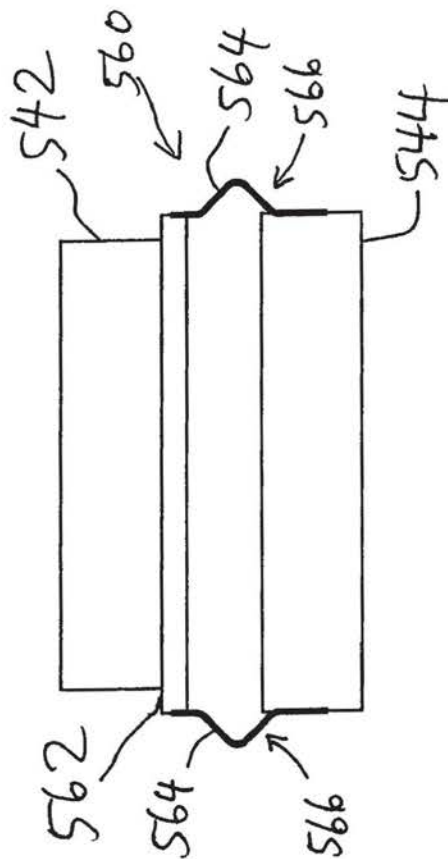


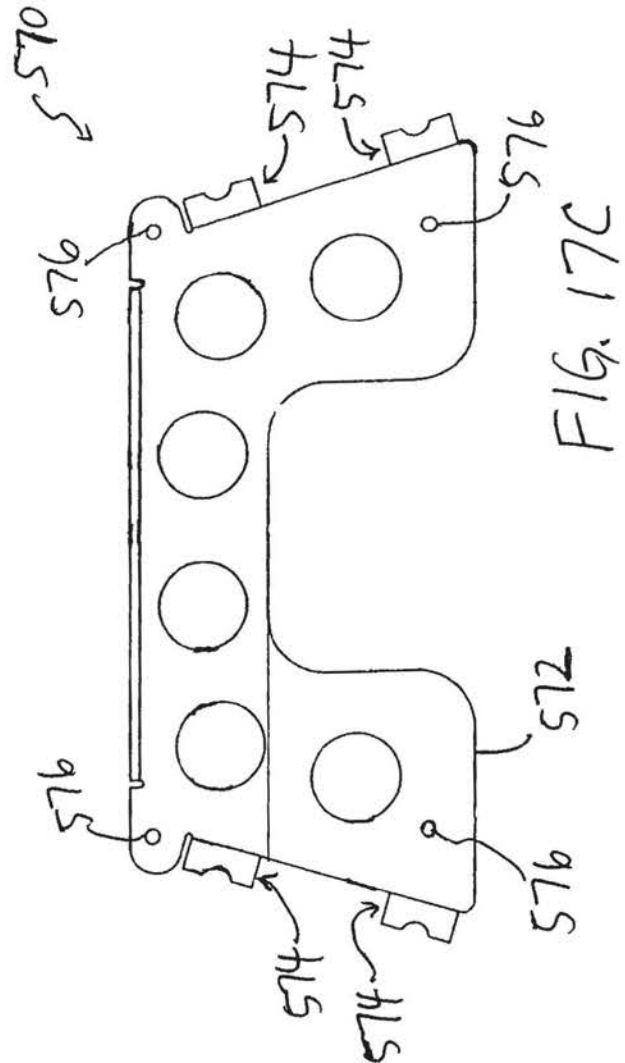
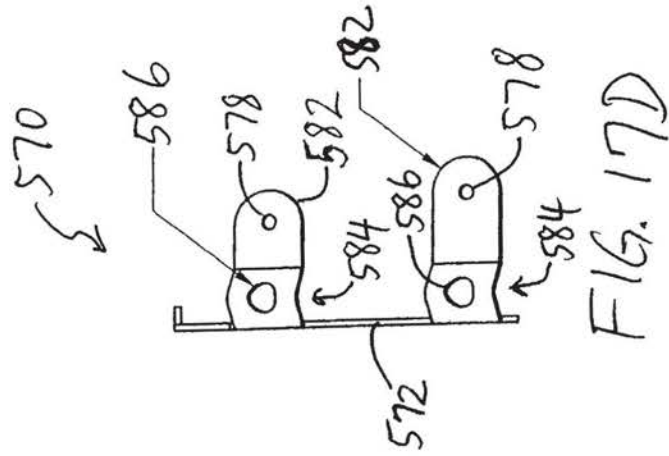
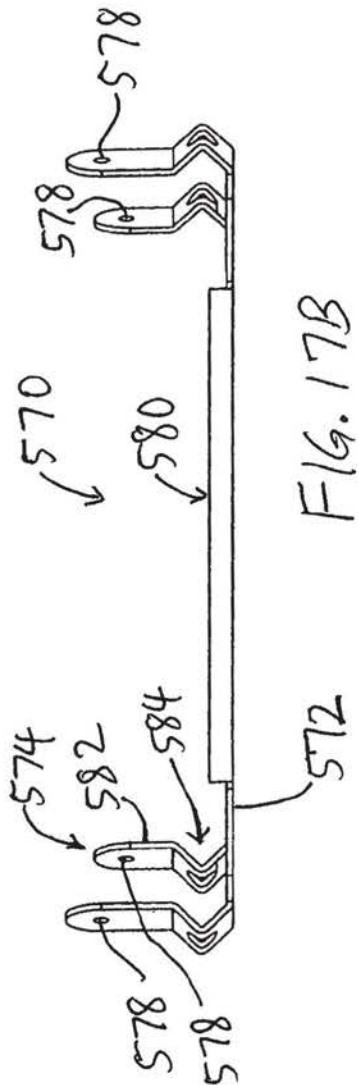
FIG. 16A

U.S. Patent

Oct. 6, 2009

Sheet 25 of 25

US 7,597,393 B1



US 7,597,393 B1

1

**HEADREST/HEAD RESTRAINT HAVING AN
INTEGRATED VIDEO SCREEN****CLAIM OF PRIORITY**

This U.S. patent application is related to U.S. Pat. No. 7,040,697, filed Mar. 20, 2003, entitled, "Headrest Having An Integrated Video Screen" and co-pending patent application Ser. Nos. 11/415,696, filed May 2, 2006, entitled, "Headrest Having An Integrated Video Screen" and 11/415,918, filed May 2, 2006, entitled, "Headrest Having An Integrated Video Screen", which are hereby incorporated by reference herein in their entirety. This U.S. patent application also claims priority to U.S. Provisional Patent Application No. 60/460,841, entitled "Integrated Video System for Vehicle Seats" filed Apr. 4, 2003, which is hereby incorporated by reference herein in its entirety.

BACKGROUND OF THE INVENTION**1. Field of the Invention**

The present invention relates to vehicles and, in particular, to a head restraint for vehicle seats having an integrated video screen mounted therein.

2. Description of the Related Art

Seat back video monitors are becoming increasingly popular in vehicles. Originally, these entertainment systems were largely confined to airplanes, however, recently, these systems have become much more popular with cars, trucks and SUVs. These entertainment systems provide the opportunity for passengers to view entertainment or educational video programs during long trips.

Typically, these systems have been installed as aftermarket products where the seat back or head restraint, whether part of an adjustable head restraint unit or a molded bucket seat, is modified to accept the video display device, however, more of these systems are being installed as original equipment. Unfortunately, existing systems are often difficult and labor intensive to mount, particularly as an aftermarket product and are also subject to being dislodged.

Generally, the devices are mounted on the outer surface of the seat back where they protrude. In many vehicles, the space between seats is limited, hence the protruding video display unit can inhibit the ability of passengers to easily get into and out of the vehicles. Moreover, passenger contact with the protruding video display screen may result in the screens being inadvertently dislodged, or result in occupant injury in a collision.

A further difficulty with many existing video display unit designs is that they are not well secured to the seat. This is particularly the case for designs that allow the video display unit to pivot about an axis to improve the viewing angle of the passenger. One common way that these display units are installed is that a bucket is installed into the seat and the peripheral rim of the bucket includes openings that receive pivot posts that extend outward from the housing of the display unit. The pivot posts are positioned within the openings and keepers or caps are then positioned in the openings to prevent the pivot posts from being removed from the openings.

In these designs, the keepers or caps are generally press fit and are exposed to the passenger. Hence, inadvertent contact may result in the keepers or caps being dislodged. Moreover, many of the passengers are children who, through boredom, may attempt to remove the keepers which can result in the video display being dislodged and potentially damaged.

2

Thus, one can see that improvements can be made on ways a video display screens or associated devices are mounted to various types of seats. Some of the areas where improvements can be made include safety issues associated with an occupant impacting the video display assembly, cosmetic integration of the video display assembly, and efficiency of packaging the video display assembly.

Hence, from the foregoing, there is a need for a seat back video display system and method of mounting that provides more secure mounting of the video display unit. To this end, there is a need for an assembly that is less likely to be dislodged through inadvertent contact and does not have exposed detachable mounting components.

SUMMARY OF THE INVENTION

The foregoing needs are addressed by the present teachings relating to a head restraint having an entertainment system. One aspect of the present teachings relates to a media assembly adapted to be installed into a seat back of a vehicle. The assembly includes a mounting structure that is coupled to the seat back of the vehicle. The seat back defines a first outer surface visible to a viewer sitting in a back seat of the vehicle. The assembly further includes a display that displays media to a viewer sitting within the vehicle. The assembly further includes a media player having an input opening into which a user can position a media storage device. The media player provides signals to the display to thereby induce the display to visually display the contents of the media storage device. The assembly further includes a housing defining a recess having a first opening that receives both the display and the media player such that the display is positioned proximate the first opening of the recess with the media player positioned inward in the recess from the first opening such that the media player does not impede visual access to the display. The housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player. The housing is adapted to be coupled to the mounting structure within the seat back of the vehicle to thereby retain the housing within the seat back such that the display is positioned adjacent the outer surface of the seat back.

In one embodiment, the housing defines a second opening and the media player is positioned within the recess such that the input opening of the media player is accessible through the second opening of the housing. In one opening, the housing is mounted to the mounting structure such that the second opening is accessible through a second outer surface of the seat. In one embodiment, the second outer surface of the seat comprises a side surface of the seat. In one embodiment, the second outer surface of the seat comprises a top surface of the seat.

In one embodiment, the housing is pivotally mounted with respect to the mounting structure such that the display screen can be adjusted for improved visibility to the viewer. In one embodiment, the housing comprises a ball and the mounting structure comprises a socket such that the ball is positioned within the socket to permit adjustment of the housing with respect to the mounting structure in two separate directions.

In one embodiment, the housing is pivotally attached to the mounting structure so as to be rotatable between a recessed position. The display is positioned substantially flush with the first outer surface of the seat and the input opening of the media player is hidden from view within the seat and a extended position. The input opening of the media player is exposed from the seat so as to be accessible to the viewer. In one embodiment, the mounting structure comprises a retainer

A000052

US 7,597,393 B1

3

that defines a recess having two opposed side walls positioned within the seat. The housing is pivotally attached to the retainer at the two opposed side walls to facilitate movement between the recessed position and the extended position. In one embodiment, the retainer defines two opposed side walls and an opposed upper and lower wall. The housing is pivotally attached to the two opposed side walls adjacent the lower wall of the retainer such that the input opening of the media player is positioned proximate the upper wall of the retainer when the housing is in the recessed position.

In one embodiment, at least one energy dissipation element is interposed between the seat and the assembly such that in the event of a collision, contact between the viewer and the media assembly results in at least a portion of the energy resulting from the collision being dissipated by the at least one energy dissipation element. In one embodiment, the at least one energy dissipation element comprises a deformable dissipation element that dissipates the energy by inelastically deforming. In one embodiment, the at least one deformable dissipation element comprises a member that is structured to have a bending point along the member such that forces on the member during a collision result in the bending of the member and dissipation of force. In one embodiment, the member comprises a first and a second leg with the bending point interposed therebetween such that forces on the member during a collision result in the first member being deformed into a position more proximate the second member. In one embodiment, the energy dissipation element is interposed between the mounting structure and the seat.

Another aspect of the present teachings relates to an electronic assembly mounted to a head restraint of a vehicle seat. The assembly includes a media player that retrieves information stored on a media storage device, processes the information, and outputs a signal corresponding to the information. The assembly further comprises a panel display device that receives the signal from the media player and displays a visual representation of the signal. The assembly further comprises a housing assembly that houses the media player and the panel display device as a substantially single unit. The housing assembly facilitates mounting of the substantially single unit to the head restraint.

Yet another aspect of the present teachings relates to a method of mounting an entertainment system to a head restraint of a vehicle. The method includes housing a media player and a panel display as a substantially single unit such that a signal output by the media player is received by the panel display and displayed as a visual representation. The method further includes mounting the housed substantially single unit to the head restraint.

Yet another aspect of the present teachings relates to a head restraint for a vehicle, where the head restraint includes a support member that provides structural integrity of the head restraint. The head restraint further includes an electronic entertainment component disposed at least partially within the rear portion of the head restraint. The head restraint further includes a coupling member that mechanically couples the electronic entertainment component to the support member. The coupling member dissipates at least a portion of energy associated with an impact of an object on the electronic entertainment component.

4

These and other features and advantages of the present teachings will become more fully apparent from the following description taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1A illustrates an adjustable head restraint for a vehicle seat having an integrated video screen mounted therein.

FIG. 1B illustrates a fixed head restraint for a vehicle seat having the integrated video screen of FIG. 1A mounted therein.

FIG. 2 illustrates a side view of the adjustable head restraint shown in FIG. 1A having the integrated video screen mounted therein with a recessed orientation.

FIGS. 3A, 3B illustrate a cross-sectional view of the adjustable head restraint shown in FIG. 1A having the integrated video screen mounted therein with a screen cover.

FIG. 4 illustrates a cross-sectional view of the integrated video screen being mounted to the head restraint via a carrier receptacle, a carrier member, and a plurality of fasteners.

FIG. 5 illustrates an perspective view of the integrated video screen being mounted to the head restraint via the carrier member and the plurality of fasteners of FIG. 4.

FIGS. 6A, 6B illustrate a perspective view of mounting the integrated video screen to the carrier member.

FIG. 6C illustrates a side view of mounting the integrated video screen to the carrier member via pivot member.

FIG. 7 illustrates a perspective view of mounting the integrated video screen to the adjustable head restraint of FIG. 1A.

FIG. 8 illustrates a cross-sectional view of the video screen mounted to the head restraint, wherein an outer skin from the head restraint is secured to the carrier receptacle.

FIG. 9A illustrates one embodiment of a video system for a vehicle seat having a head restraint with an integrated video monitor and a side-loading media player.

FIG. 9B illustrates another embodiment of the video system for a vehicle seat.

FIG. 9C illustrates a plurality of recesses formed in the head restraint.

FIG. 10 illustrates another embodiment of a video system for the vehicle seat having the head restraint with the integrated video monitor and a top-loading media player.

FIGS. 11A-11C illustrate still another embodiment of a video system for the vehicle seat having the head restraint with a pivotally attached video monitor and media player.

FIGS. 12A-12B illustrate side views of the video system of FIGS. 11A-11B.

FIG. 13 illustrates an exploded view of the video system.

FIGS. 14A and B illustrate cutaway views of energy dissipating head restraint assemblies for adjustable and fixed vehicle seats having a media component.

FIGS. 15A and B illustrate dissipation of energy due to an impact force on the media component.

FIGS. 16A and B illustrate one embodiment of a energy dissipating coupling between the media component and a support member associated with the vehicle seat, where energy is dissipated by deformation of one or more deformable tabs associated with the coupling.

FIGS. 17A-D illustrate one embodiment of the energy dissipating coupling of FIGS. 16A and B.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Reference will now be made to the drawings wherein like numerals refer to like parts throughout. A head restraint for

A000053

US 7,597,393 B1

5

vehicle seats having an integrated video screen mounted therein in a flush or recessed manner will be described in greater detail herein below with reference to the drawings. In one aspect, it should be appreciated that the term vehicle seats refers to a plurality of generally known vehicle seats, such as those manufactured for automobiles, buses, boats, cars, semi-trucks, etc., wherein the following discussion can be similarly applied to these various types of vehicle seats without departing from scope of the present teachings. In addition, the following discussion refers to mounting the integrated video screen to the head restraint of vehicle seats but may also be applied to other various component features of vehicle seats, such as the seat back, without departing from the scope of the present teachings.

FIG. 1A illustrates an adjustable head restraint 100 for a first vehicle seat 102 having an integrated video screen 104 mounted therein. As illustrated in FIG. 1A, the adjustable head restraint 100 is coupled to the seat 102 via posts 107 that extend therefrom and allow vertical adjustment of the adjustable head restraint 100 with respect to the seat 102 in a generally known manner. FIG. 1B illustrates a fixed head restraint 110 for a second vehicle seat 112 having the integrated video screen 104 mounted therein. In one embodiment, the video screen 104 is mounted within a head restraint bun 106, 116 (FIG. 1A) that is adapted to receive the video screen 104 for firm attachment therein in a manner that will be described in greater detail herein below. In addition, as will be described in greater detail herein below, the video screen 104 is mounted such that a front surface 120 of the video screen 104 is either flush or recessed from a contour 122 (FIG. 1A) of the head restraint 100 (FIG. 1A), 110.

As shown in FIGS. 1A and B, the video screen 104 comprises a panel type display. In one embodiment, the video screen 104 comprises a generally known LCD (liquid crystal display). Other panel type devices, such as flat panel or flexible panel display devices can also be used as the video screen 104. Such a monitor or terminal that can be electrically coupled to a video entertainment system so as to receive video signals therefrom for viewing of movies, television, internet web pages, video games, etc. As illustrated, the video screen 104 is generally rectangular in shape with the planar front surface 120 that is viewable by a user. In one aspect, it should be appreciated that the degree of recessed depth (with no depth comprising a flush mount) of the integrated video screen 104 and the manner in which the contour 122 of the seat 102, 112 is shaped may be selected such that the shape (side view, for example) of the head restraint 100, 110 with the integrated video screen 104 mounted therein is generally similar to the shape of the head restraint 100, 110 without the integrated video screen 104. Moreover, it should be appreciated that the vehicle seats 102, 112 may comprise any one of a number of various types or models of generally known vehicle seats without departing from the scope of the present invention.

FIG. 2 illustrates a side view of the adjustable head restraint 100 shown in FIG. 1A having the integrated video screen 104 mounted therein with a recessed orientation. It should be appreciated that the following discussion is with respect to the adjustable head restraint 100 of FIG. 1A but may be similarly applied to the fixed head restraint 110 of FIG. 1B without departing from the scope of the present teachings.

FIG. 2 further illustrates the side view shape or contour 122 of the head restraint 100. As illustrated in FIG. 2, the contour 122 of the head restraint 100 is maintained due to the recessed orientation of the video screen 104 within the head restraint bun 106. In addition, an opening 130 is formed in a rear section 132 of the head restraint 100 so as to define a substan-

6

tially rectangular interior region 136 within the head restraint bun 106 below an outer surface 134 of the head restraint 100. As further illustrated in FIG. 2, the video screen 104 can then be positioned adjacent the opening 130 so as to be firmly positioned within the interior region 136 of the head restraint bun 106. Moreover, the recessed orientation may be defined by a depth 138 between the front surface 120 of the video screen 104 and the outer surface 134 of the head restraint 100. The depth 138 therebetween may vary in magnitude depending on the thickness of the head restraint bun 106 and/or the internal structural characteristics of the head restraint 100, which may vary with respect to the type or model of vehicle seat used. In one embodiment, the depth 138 of the recessed orientation may comprise a magnitude of approximately zero so as to define a flush mounted video screen 104, wherein the front surface 120 of the video screen 104 is generally aligned with the outer surface 134 of the head restraint 100.

In one embodiment, orientation of the video screen 104 can be adjusted to provide an generally optimal viewing angle for an occupant. Such an orientation of the video screen 104 in some embodiments of the head restraint 100 may result in the front surface 120 being not generally parallel to the outer surface 134 of the head restraint 100. In such an embodiment, the video screen 104 is mounted in the head restraint 100 so as to generally maintain the cosmetic integrity of the original design while providing a generally optimal viewing angle.

FIG. 3A illustrates a cross-sectional view of the adjustable head restraint 102 shown in FIG. 1A having the integrated video screen 104 mounted therein with the recessed orientation shown in FIG. 2 and a screen cover 140. In one embodiment, the screen cover 140 is coupled to the rear section 132 of the head restraint 100 via a hinge 142 so as to overlie the video screen 104 and at least part of the opening 130 formed therein. The screen cover 140 may comprise generally rectangular shape and is oriented generally parallel to the front surface 120 of the video screen 104 so as to temporarily occlude the video screen 104. In one aspect, as further illustrated in FIG. 3A, the screen cover 140 can be positioned adjacent the opening 130 so as to substantially align with the outer surface 134 of the head restraint 100 thus forming a flush mounting therewith. It should be appreciated that the screen cover 140 may be positioned within the opening 130 so as to be recessed with respect to the outer surface 134 of the head restraint 100 without departing from the scope of the present teachings. Moreover, the screen cover 140 may comprise a rigid material, such as plastic, metal, etc. Alternatively, in another aspect, the screen cover 140 may comprise a piece or flap of material from an outer skin 230 (FIG. 8) of the vehicle seat 102 that is attached to the head restraint 100 adjacent the lower side of the video screen 104.

In still another aspect, as illustrated in FIG. 3B, the screen cover 140 may comprise an impact attenuating section 143 comprising a material such as foam, various types of padding, an air cushion, etc. so as to soften the force of an impact from an object. For example, during a car accident, a person's head may be propelled towards the screen cover 140, wherein the impact attenuating material may soften the impact to the head restraint 102 to thereby protect the person's head and the video screen 104 from damage.

Also, in one embodiment, the video screen 104 can be viewed by opening the screen cover 140 or temporarily occluded by closing the screen cover 140. Hence, the screen cover 140 can be outwardly rotated about the hinge 142 in a first direction 144 to openly view the video screen 104, or the screen cover 140 can be inwardly rotated about the hinge 142 in a second direction 146 opposite the first direction 144 to temporarily occlude the video screen 104. Advantageously,

A000054

US 7,597,393 B1

7

the screen cover **104**, when closed, conceals the video screen **104** from view thus, in some situations, functions as a thief deterrent.

Moreover, in one aspect, the recessed configuration of the video screen **104** facilitates the manner in which the screen cover **140** may be deployed. For example, the video screen **104** may not physically interfere with the closing of the screen cover **140**. In addition, as illustrated in FIGS. 3A, 3B, the screen cover **140** is intended to "hide" the video screen **104** from outside observers, thereby reducing the probability that the video screen **104** will be a target of theft. As further illustrated in FIGS. 3A, 3B, the screen cover **140** may further comprise a means for engagement **147** that allows the screen cover **140** to remain in the "up" or closed configuration. In general, it should be appreciated that some possible means for achieving such an engagement include but are not limited to magnetic strips, mechanical clips, velcro strips, and the like.

FIG. 4 illustrates a cross-sectional view of the integrated video screen **104** being mounted to the head restraint **100** via a carrier receptacle **150**, a carrier member **160**, and first fasteners **170**. FIG. 5 illustrates a perspective view of the integrated video screen **104** being mounted to the head restraint **100** via the carrier receptacle **150**, the carrier member **152**, and the first fasteners **170**. In one embodiment, the carrier receptacle **150** comprises a plurality of planar sidewalls **152** and a rear planar wall **154** that are joined together in a manner so as to form a substantially rectangular outer structure **156** having an inner recessed region **158** that is adapted to receive the carrier member **160** therein. Similarly, the carrier member **160** comprises a plurality of planar sidewalls **162** and a rear planar wall **164** that are joined together in a manner so as to form a substantially rectangular outer structure **166** having an inner recessed region **168** that is adapted to receive the video screen **104** therein.

As illustrated in FIG. 4, the video screen **104** may be mounted within the carrier member **160** via side fasteners **180** (shown in FIGS. 6A, 6B) and then the carrier member **160** is mounted within the carrier receptacle **150** via the first fasteners **170** so as to simplify the mounting of the video screen **104** to the head restraint **100** including the head restraint bun **106**. In one aspect, the first fasteners **170** may comprise a plurality of flexible engagement members **172** that extend therefrom so as to mechanically couple with a plurality of mounting apertures **174** (FIG. 5) formed in the rear wall **154** of the carrier receptacle **150**. The first fasteners **170** may further comprise a central member **173** that extends outward from the rear wall **164** of the carrier member **160**. Also, the flexible engagement members **172** are attached to the central member **173**, wherein the flexible engagement members **172** are deformable so as to allow insertion of the central member **173** into the mounting apertures **174** in the rear wall **164** of the receptacle member **150**. Moreover as shown in FIG. 4, the flexible engagement members **172** are biased outward so as to inhibit removal of the central member **173** from the mounting apertures **174** in the rear wall **154** of the receptacle member **150**. In addition, the first fasteners **170** comprise a head **176** that abuts the rear wall **164** of the carrier member **152** and is positioned through a plurality of second apertures **178** formed in the rear wall **164** of the carrier member **160**.

Advantageously, as shown in FIGS. 4 and 5, the video screen **104** can be mounted to the head restraint **100** via the carrier receptacle **150** and the carrier member **160** without using external fasteners that may be seen. Hence, the video screen **104** can be mounted to the head restraint **100** in a more aesthetically appealing manner, wherein the front surface **120** of the video screen **104** recessed or flush mounted with

8

respect to the outer surface **134** of the head restraint **100**, and wherein the first and second fasteners **170**, **180** are concealed from view.

As illustrated in FIG. 5, the sidewalls **152** of the carrier receptacle **150** each comprise at least one sidewall aperture **200** having at least one serrated tooth **202** protruding from an interior sidewall **204**. In one embodiment, the at least one serrated tooth **202** is triangular in shape having a pointed tip **206** that projects outward from the interior sidewall **204** in a horizontal manner. It should be appreciated that the serrated tooth **202** may comprise any one of a number of various shapes known in the art without departing from the scope of the present teachings. Additionally, as will be also shown in FIG. 8, the pointed tip **206** engages with the outer skin **230** (FIG. 8) and inhibits removal of the outer skin **230** from the at least one sidewall aperture **200** formed in the carrier receptacle **150**. Advantageously, as will be described in greater detail herein below, the serrated tooth **202** allows outer skin from the buns **106**, **116** (FIGS. 1A and B) to be attached to the carrier receptacle **150** by wrapping the outer skin around the planar sidewalls **152** and into the recessed region **158** of the carrier receptacle **150** and then securing the outer skin to the serrated tooth **202**.

FIG. 6A illustrates a perspective view of attaching the integrated video screen **104** to the carrier member **160** via the second fasteners **180**. In one embodiment, the planar sidewalls **162** of the carrier member **160** comprise pivot apertures **184** that allow the video display **104** to be mounted to the carrier member **160**. Also, the pivot apertures **184** are adapted to rotatably receive the second fasteners **180**. As illustrated in FIG. 6A, one embodiment of the second fasteners **180** comprise a threaded region **186** that mechanically couples to threaded apertures **196** (FIG. 7) formed in the video screen **104** in a generally known manner so as to be securely attached thereto. Moreover, the second fasteners **180** further comprise a head **182** and a smooth pivot region **188** interposed between the threaded region and the head **182**.

In one aspect, the pivot region **188** of the second fastener **180** rotatably communicates with the pivot aperture **184** of the carrier member **160** to thereby allow the video screen **104** to pivot or tilt with respect to the carrier member **160** and/or the head restraint **100**, **110** along a horizontal pivot axis **190** defined by the horizontally mounted second fasteners **180**. Hence, the video screen **104** is pivotally attached to the carrier member **160** such that the plane of the video screen **104** can be adjusted with respect to the head restraint **100**, **110** by a user about the defined horizontal pivot axis **190**. Advantageously, the horizontal pivot axis **190** allows the video screen **104** to readily pivot when mounted to the head restraint **100**, **110** to thereby allow greater positional flexibility during viewing of the video screen **104** by a user.

FIG. 6B further illustrates a perspective view of attaching the integrated video screen **104** to the carrier member **162** via the second fasteners **180**. In one embodiment, as illustrated in FIG. 6B, the second fasteners **180** can be mounted vertically through the planar sidewalls **162** of the carrier member **160**. The pivot region **188** of the vertically mounted second fasteners **180** rotatably communicates with the pivot aperture **184** of the carrier member **160** to thereby allow the video screen **104** to pivot or tilt side-to-side with respect to the carrier member **160** and/or the head restraint **100**, **110** along a vertical pivot axis **191** defined by the vertically mounted second fasteners **180**. Hence, the video screen **104** is pivotally attached to the carrier member **160** such that the plane of the video screen **104** can be adjusted with respect to the head restraint **100**, **110** by a user about the vertical pivot axis **191**. Advantageously, the vertical pivot axis **191** allows the video

A000055

US 7,597,393 B1

9

screen 104 to readily pivot when mounted to the head restraint 100, 110 to thereby allow greater positional flexibility during viewing of the video screen 104 by a user.

In one aspect, it should be appreciated that the second fasteners 180 may comprise generally known screws, such as sheet metal screws, without departing from the scope of the present invention. It should also be appreciated that the pivot region 188 of the second fasteners 180 may be threaded in a manner such that the video screen 104 can still pivot with respect to the carrier member 150 without departing from the scope of the present invention.

FIG. 6C illustrates a view of attaching the integrated video screen 104 to the carrier member 160 via a pivot member 240. In one embodiment, as illustrated in FIG. 6C, the pivot member 240 comprises a spherical ball 242 attached to the video screen 104 via a shaft 244 and a plate 246. The spherical ball 242 is positioned within a spherical receptacle 248 formed in the rear wall 164 of the carrier member 160. As illustrated in FIG. 6C, the rear wall 164 of the carrier member 160 may be dimensioned so as to accommodate the spherical receptacle 248. In one aspect, the plate 246 of the pivot member 240 may be attached to the video screen 104 using an adhesive, such as epoxy or glue, or fasteners, such as screws or bolts. In addition, the shaft 244 distally extends from the plate 246 towards the spherical receptacle 248 of the carrier member 160. Also, the shaft 244 and the spherical ball 242 may be formed as an integral part of the plate 246 or may be formed separately and interconnected to the plate 246 via an adhesive or fasteners.

Moreover, once the pivot member 240 is attached to the video screen 104 in a manner as previously described, the spherical ball 242 of the pivot member 240 can be pressed to fit within the spherical receptacle 248 formed in the rear wall 164 of the carrier member 160. In one aspect, the spherical ball 242 may be sized at least less than the size of the spherical receptacle 248 so as to allow rotational movement therein. Advantageously, the resulting interconnection between the spherical ball 242 of the pivot member 240 and the spherical receptacle 248 of the carrier member 160 defines a pivot point 250 to thereby allow the Video screen 104 to pivot, tilt, or rotate in a multi-directional manner with respect to the defined pivot point 250. Therefore, the defined pivot point 250 allows the video screen 104 to readily pivot when mounted to the head restraint 100, 110 to thereby allow greater positional flexibility during viewing of the video screen 104 by a user.

FIG. 7 illustrates a perspective view of mounting the integrated video screen 104 to the head restraint 100, 110 of FIGS. 1A and B. In one embodiment, as illustrated in FIG. 7, the opening 130 is formed in the head restraint bun 106 so as to define the substantially rectangular interior region 136 and to receive the carrier receptacle 150. The carrier receptacle 150 can then be positioned within the opening 130 so that the planar sidewalls 152 and the planar rear wall 154 abut the interior walls 226 of the mounting recess 136 formed in the head restraint bun 106. In one embodiment, the carrier receptacle 150 can be secured to the head restraint 100, 110 via one or more third fasteners 220, such as screws, machine screws, sheet metal screws, clips, etc. As illustrated in FIG. 7, the third fasteners 220 are positioned through rear wall apertures 222 formed in the rear wall 154 of the carrier receptacle 150 and coupled to rear mounting apertures 224 formed in a back wall 228 of the mounting recess 136 of the head restraint bun 106. Advantageously, the third fasteners 220 can be securely attached to a structural component (not shown) of the head restraint 100, 110, such as an internal framework member of

10

the head restraint 100, 110, so as to form a rigid attachment between the carrier receptacle 150 and the head restraint 100, 110.

In addition, the video screen 104 may be mounted to the carrier member 160 so as to pivot with respect thereto in a manner as previously described with reference to FIGS. 6A, 6B, 6C. Following, the carrier member 160 including the video screen 104 can then be mounted to the carrier receptacle 150 via the first fasteners 170 in a manner as previously described with reference to FIG. 4. Advantageously, this method of attaching the video screen 104 to the head restraint 100, 110 via the carrier receptacle 150, the carrier member 160, and the fasteners 170, 180 allows the video screen 104 to be securely mounted to the head restraint 100, 110 while providing a means for pivoting the video screen 104 with respect to the head restraint 100, 110 so as to improve the viewing range by a user. It will be appreciated that the mounting assembly describe above in reference to FIG. 7 may also be used in the head restraint 110 of the bucket type seat of FIG. 1B.

FIG. 8 illustrates a cross-sectional view of the video screen 104 mounted to the head restraint 100, wherein the outer skin 230 of the head restraint 100 of the vehicle seat 102 is attached to the carrier receptacle 150 and the carrier member 160 with the video screen 104 mounted therein is mounted within the mounting recess 136 of the carrier receptacle 150. As is generally known, many vehicle seats comprise the illustrated outer skin 230, such as fabric, leather, upholstery, vinyl, etc., that provides a outer surface 232 for a user to lean against or rest upon. In one aspect, when mounting the integrated video screen 104 into the head restraint 100, 112 of the vehicle seat 102, 112, the outer skin 230 is adapted to accommodate the video screen 104 including the carrier receptacle 150. In some situations, one or more flaps 234 can be formed in the outer skin 230 and attached to the one or more serrated teeth 202 formed in the planar sidewalls 152 of the carrier receptacle 150.

As further illustrated in FIG. 8, the carrier receptacle 150 may be positioned within the mounting recess 136 formed in the head restraint bun 106, and then the outer skin 230 is secured to the serrated teeth 202 via the flaps 234 formed therein by hooking the flaps 234 to one or more of the serrated teeth 202. Once the outer skin 230 is attached to the serrated teeth 202 via the flaps 234, the carrier member 160 is firmly pressed within the mounting recess 136 of the head restraint bun 106 so that the first fasteners 170 couple to the mounting apertures 174 formed in the rear wall 154 of the carrier receptacle 150.

Advantageously, this interconnection between the carrier member 160 and carrier receptacle 150 provides a quick and easy means for mounting of the video screen 104 to the head restraint 100, 110. In addition, the pressed fit of the outer skin between the carrier member 160 and the carrier receptacle 150 further secures the outer skin of the vehicle seat 102, 112 to the carrier receptacle 150. As a result, the outer skin is securely held to the carrier receptacle 150 via the one or more serrated teeth 202 formed in the planar sidewalls 152 of the carrier receptacle 150 and the pressed fit of the carrier member 160 within the mounting recess 136 of the carrier receptacle 150.

FIG. 9A illustrates one embodiment of a video system 300 for a vehicle seat or seat back 302 having a head restraint 304 with an integrated video display or monitor 306 and a side-loading media player 308 mounted therein. In one embodiment, as illustrated in FIG. 9A, the head restraint 304 is coupled to the vehicle seat or seat back 302 via posts 310 that extend therefrom and allow vertical adjustment of the head

A000056

US 7,597,393 B1

11

restraint 304 with respect to the vehicle seat 302 in a generally known manner. In one aspect, the video monitor 306 is mounted within a rear section 312 of the head restraint 304 of the vehicle seat 302 that is adapted to receive the video monitor 306 for secure attachment therein.

In addition, the video monitor 306 is generally rectangular in shape with a planar front surface 320 that is viewable by a user. Also, the video monitor 306 is mounted such that the front planar surface 320 thereof is either flush or recessed from a rear contour 322 of the head restraint 304. In one embodiment, the video monitor 306 comprises a panel display device. Such a panel device may comprise, by way of example, a flat panel display, a flexible panel display, or a liquid crystal display (LCD). Such a monitor or terminal that can be electrically coupled to a video entertainment system including the illustrated media player 308 so as to receive video signals therefrom for viewing of movies, television, internet web pages, video games, etc.

In one embodiment, the media player 308 is mounted within a first side section 316 of the head restraint 304 that is adapted to receive the media player 308 for secure attachment therein. In addition, the media player 308 is generally rectangular in shape with a planar front surface 330 that is accessible by a user from the first side section 316 of the head restraint 304. Also, the media player 308 is mounted such that the front planar surface 330 thereof is either flush or recessed from a first side contour 332 of the head restraint 304. It should be appreciated that the media player 308 may also be mounted on a second side section 318 of the head restraint 304 in a similar manner without departing from the scope of the present teachings. In addition, it should also be appreciated that a recess (shown in FIG. 9C as 328) may be formed in the side section 316 of the head restraint 304 and may be adapted to receive the media player 308 for secure attachment therein without departing from the scope of the present teachings.

Additionally, in one aspect, the media player 308 may comprise a generally known digital video disc (DVD), hard disc storage, memory chip, and the like player that can be electrically coupled to a video entertainment system including the illustrated video monitor 306 so as to provide video signals thereto for displaying of movies, television, internet web pages, video games, etc. In addition, the media player 308 is mounted within the head restraint 304 so as to not interfere with the operation of the panel display 306. Moreover, in another aspect, the media player 308 is electrically coupled to the panel display 306 such that, during operation, a user can insert a media storage device, such as a DVD (not shown), into the media player 308 in a generally known manner so as to view images stored on the media storage device via the panel display 306. Furthermore, in still another aspect, the panel display 306 may further comprise an audio interface 334, such as a headphone jack, that is electrically coupled to the media player 308 so as to provide audio signals thereto for listening to movies, television, music, video games, etc. In one embodiment, the panel display 306 may include one or more interfaces, such as audio/visual jacks, for viewing signals from one or more auxiliary media devices.

In another aspect, the video system 300 may comprise a wireless component that can be used to receive wireless communication signals for communication with a backbone network (not shown). For example, the backbone network may include various wireless information exchange networks, such as an Ethernet, Intranet, and/or Internet server or communications interface. In general, the video system 300 may establish a communication link with the backbone network, which may comprise various types of external wireless com-

12

munication links via satellite or antenna, hardwired communication links within the vehicle for internal communications, or some combination thereof to facilitate the exchange of information between the video system 300 and the backbone network.

Advantageously, a user may interact with the backbone network via the video system 300 to stream video, exchange images, download audio files, text messaging, online financial transactions, remote teleconferencing, etc. In addition, the media player 308 may be adapted to comprise digital memory components, such as hard drives, flash memory, magnetic memory, various types of non-volatile memory components, etc., for storing audio, video, and data files and information for viewing, exchanging, and processing thereof at the convenience of the user for purposes of personal entertainment, business operations, etc.

Moreover, the media player 308 including the panel display 306 may comprise various types of input ports, such as USB, serial, parallel, firewire, RCA, etc., to facilitate peripheral interconnection, such as connection to PDAs, laptop computers, printers, various types of storage media, audio/video devices, speaker systems, etc., for the purpose of interaction therewith. Therefore, the video system 300 including the panel display 306 and the media player 308 can be advantageously adapted to integrate various technologies that are associated with most computer based systems.

Furthermore, it should be appreciated that the degree of recessed depth (with no depth comprising a flush mount) of the panel display 306 and the integrated media player 308 may be selected such that the shape (front or side view, for example) of the head restraint 304 with the panel display 306 and media player 308 mounted therein is generally similar to the shape of the head restraint 304 without the panel display and player positioned therein. In addition, it should also be appreciated that the vehicle seats 302 may comprise any one of a number of various types or models of generally known vehicle seats without departing from the scope of the present teachings.

FIG. 9B illustrates another embodiment of the video system 300 for a vehicle seat 362 having the head restraint 304 formed as part of the vehicle seat or seat back 302. It should be appreciated that the video system 300 including the video display and player may be integrated into the illustrated vehicle seat 362.

FIG. 9C illustrates first and second recesses 326, 328 formed in the head restraint 304. In one embodiment, the recesses 326, 328 are formed in the head restraint 304 so as to receive the panel display 306 and media player 308, respectively, for secure attachment thereto. As illustrated in FIG. 9C, the first recess 326 may be formed in the rear section 312 of the head restraint 304 and may be adapted to receive the panel display 306 for secure attachment therein. Also, as further illustrated in FIG. 9C, the second recess 328 may be formed in the first side section 316 or second side section 318 of the head restraint 304 and may be adapted to receive the media player 308 for secure attachment therein. It should be appreciated by those skilled in the art that the recesses 326, 328 may be formed in the vehicle seat 362 of FIG. 9B without departing from the scope of the present teachings.

FIG. 10 illustrates another embodiment of a video system 350 for the vehicle seat 302 having the head restraint 304 with the panel display 306 and a top-loading media player 308 mounted thereto. As illustrated in FIG. 2, the panel display 306 is mounted within the head restraint 304 in a manner as previously described. Alternatively, the media player 308 is mounted within an upper section 352 of the head restraint 304 that is adapted to receive the media player 308 for secure

A000057

US 7,597,393 B1

13

attachment therein. In addition, the planar front surface 330 of the media player 308 is accessible by a user from the upper section 352 of the head restraint 304. Also, the media player 308 is mounted such that the front planar surface 320 thereof is either flush or recessed from an upper contour 354 of the head restraint 304. Moreover, the media player 308 is mounted within the upper section 352 of the head restraint 304 so as to not interfere with the operation of the panel display 306.

It should be appreciated by those skilled in the art that the panel display 306 and media player 308 function in a similar manner as previously described with reference to FIG. 9A. In addition, it should also be appreciated that a recess (not shown) may be formed in the upper section 352 of the head restraint 304 and may be adapted to receive the media player 308 for secure attachment therein without departing from the scope of the present teachings. Moreover, it should also be appreciated by those skilled in the art that the top-loading media player 308 as illustrated in FIG. 10 may be formed in the vehicle seat 362 of FIG. 9B without departing from the scope of the present teachings.

FIGS. 11A-11C illustrate still another embodiment of a video system 370 for the vehicle seat 302 having the head restraint 304 with the panel display 306 and media player 308 pivotally attached thereto. FIG. 12A illustrates a side view of the video system 370 illustrated in FIG. 11A in a deployed orientation 380. FIG. 12B illustrates a side view of the video system illustrated in FIG. 11A in a retracted orientation 382. As illustrated in FIGS. 11A-11B, the panel display 306 and media player 308 are mounted within a recess 384 formed in the rear section 312 of the head restraint 304 that is adapted to receive the panel display 306 and media player 308 for pivotal attachment therein.

In one embodiment, the panel display 306 and media player 308 are mounted within a housing 340 (FIG. 12A) so as to define the video system 370, which can be retracted and deployed from the recess 384 via a pivot member 386 (FIGS. 12A-12B). As illustrated in FIG. 1A, the planar front surface 330 of the media player 308 is accessible from a top portion 342 of the housing 340 by a user when the housing 340 or video system 370 is pivoted from the recess 384 in the deployed orientation 380 (FIG. 12A). In another embodiment, as illustrated in FIG. 1B, the media player 308 may be mounted within the housing 340 adjacent to the side portion 344 of the housing 340 so as to be accessible therefrom. In addition, it should be appreciated by those skilled in the art that the pivotally mounted video system 370 as illustrated in FIGS. 11A-12B may be mounted to the vehicle seat 362 of FIG. 9B without departing from the scope of the present teachings.

FIG. 11C illustrates the panel display 306 and media player 308 partially deployed or pivoted outward from the head restraint 304 of the vehicle seat 302. In one embodiment, the pivot member 386 (FIGS. 12A-12B) allows the panel display 306 and media player 308 to be deployed or pivoted a first distance from the recess 384 formed in the head restraint 304 so that storage media 440 (FIG. 13), such as a compact disc (CD) or digital video disc (DVD), can be received by the media player 308 for viewing thereof. It should be appreciated by those skilled in the art that the pivotal displacement of the panel display 306 and media player 308 from the recess 384 may vary in length without departing from the scope of the present teachings.

Advantageously, this allows a user to readily access the media player 308 for insertion and ejection of storage media into and out of the media player 308. In addition, the planar front surface 320 (FIG. 10) of the panel display 306 is view-

14

able by a user when the video system 370 is pivoted within the recess 384 in the retracted orientation 382 (FIG. 12B). As illustrated in FIG. 12B, the retracted orientation 382 of the video system 370 allows a user to readily view images displayed on the panel display 306. Moreover, the panel display 306 and media player 308 function in a similar manner as previously described with reference to FIG. 9A.

As further illustrated in FIGS. 12A-12B, the pivot member 386 pivotally attaches the video system 370 to the inner sidewalls of the recess 384 formed in the rear section 312 of the head restraint 304. Advantageously, the pivot member 386 allows for the video system 370 to be pivoted outward from the recess 384 so that a user can readily access the media player 308, and, in addition, the pivot member 386 also allows for the video system 370 to be pivoted towards the recess 384 so as to engage the recess 384 in the retracted orientation 382 so that user can readily view the panel display 306. As further illustrated in FIGS. 12A-12B, the head restraint 304 may further comprise a means for engagement 390 that allows the video system 370 to be secured in the retracted orientation 382. In general, it should be appreciated that some possible means for achieving such an engagement include but are not limited to magnetic components, mechanical clips, velcro strips, and the like.

FIG. 13 shows an exploded view of one embodiment of a media system 300 mounted to a head restraint 304. In one embodiment, the head restraint 304 is an adjustable head restraint, and includes a support member 450 mounted to generally vertical posts 310. The head restraint may also be a generally fixed part of a seat such as a bucket seat. Thus, the concepts of mounting the media system to the head restraint also apply to the fixed seats.

As shown in FIG. 13, a receptacle 404 is shown to mount to the support member 450 by a first fasteners 410. The first fasteners 410 may include screws, clips, and other fastening means. Thus in the embodiment shown in FIG. 13, the receptacle 404 is mounted substantially within the head restraint 304 so as to be able to receive the media system 300 through an opening 384 defined by the head restraint 304 in a manner described below.

In one embodiment, the receptacle 404 may be incorporated into the head restraint 304 by having a bun material (such as foam) molded about the receptacle 404. Thus, although the receptacle 404 is shown to be mounted to the support member 450 in FIG. 13, it will be understood that the receptacle 404 can be mounted to the head restraint 304 by such molding process.

As further shown in FIG. 13, one embodiment of the media system 300 includes a housing that houses a media player 308 and a panel display 306 as a substantially single unit. Such a modular media system 300 can be mounted generally within the receptacle 404 quickly and efficiently.

In one embodiment, the housing includes a shell member 424 that allows mounting of the media player 440 and the panel display 306 such that the viewable portion of the panel display 306 generally faces towards a viewer. The media player 440 can be mounted to the shell member 424 in a number of ways, and the panel display 306 can be mounted adjacent the media player 440 in a number of ways. In one embodiment, the media player 440 can be mounted to a rear plate member 422 via mounting members 430 and second fasteners 432. The second fasteners may include screws, clips, and other fastening means. The rear plate member 422 can be mounted to the shell member 424 in a number of ways, including but not limited to fasteners such as screws, clips, retainer, and the like.

A000058

US 7,597,393 B1

15

In one embodiment, the media system 300 also includes a front plate member 420 that generally frames the panel display 306. In one embodiment, the front plate member 420 includes tabs 434 that are adapted to mount to other parts of the housing thereby at least partially encapsulating the media player 308 and the panel display 306 as a modular unit.

In one embodiment, the shell member 424 that houses the media player 308 and the panel display 306 is coupled to a carrier member 402. The coupling between the shell member 424 and the carrier member 402 can be achieved in a number of ways. In one embodiment, the coupling may allow the shell member 424, and thus the media player 308 and the panel display 306, to pivot about a selected location on the carrier member 402. Thus in the embodiment shown in FIG. 13, the coupling includes pivot fasteners 412 (shown on one side) that extend through holes 442 defined by the carrier member 402, and fasten to holes 444 defined by the shell member 424. Thus, the pivot fasteners 412 allow the shell member, and thus the media player 308 and the panel display 306, to pivot about an axis defined by the pivot fasteners 412. Such a pivotable motion of the shell member 424 allows the viewer to adjust the viewing angle of the panel display 306.

In other embodiments, the shell member 424 can be coupled to the carrier member 402 to allow different pivoting motion(s). As an example, such coupling may allow the panel display to be pivoted in a side-to-side manner (by having pivot fasteners extend generally vertically). In another example, the coupling may include a ball and socket type swivel that allows the panel to be pivotally rotated about the carrier member in a number of ways. Such pivoting means are described above in reference to FIGS. 6A-C.

As further shown in FIG. 13, the carrier member 402 (with the shell member 444 mounted therein) mounts within the receptacle 404. The carrier member 402 may be mounted to the receptacle 404 in a number of ways. In one embodiment, a relatively quick mounting can be achieved by using fasteners 410 that are similar to the fasteners 170 described above in reference to FIG. 4. The carrier member 402 can also be mounted to the receptacle 404 by, for example, other forms of fasteners, clips, retainers, and the like.

Thus, one can see that in one embodiment, the carrier member 402 and various parts therein can be preassembled. The receptacle 404 can also be premounted to the head restraint 304. The mounting of the carrier member 402 can then be achieved by "snapping" the carrier member 402 within the receptacle 404, thereby simplifying the installation of the media player 308 and the panel display 306.

Such a mounted media system then allows a user to pivot the shell member 424 to allow insertion or removal of the storage media 440, such as a DVD, to or from the media player. The pivotable motion of the shell member 424 also allows the viewing angle of the panel display 306 to be adjusted.

One aspect of the present teachings relates to a head restraint having a media component mounted in a manner that allows dissipation of energy imparted on the media component when it is impacted by a moving object such as a head of an occupant. As an example, a rear passenger sitting behind a media component may experience a sudden deceleration during a frontal impact collision, and the passenger's head or other body part may impact the media component. A dissipation of such a collision energy can reduce the likelihood and/or severity of injury to that passenger.

FIGS. 14 to 17 now show an assembly having such an energy dissipating feature. As shown in a cutaway view of FIG. 14A, one embodiment of an energy dissipating head restraint assembly 500 is adapted for an adjustable head

16

restraint 502. The energy dissipating assembly 500 includes one or more posts 506 that allow generally vertical adjustment of the head restraint 502, and a support member 504 mechanically coupled to the one or more posts 506, so as to provide structural integrity of the head restraint 502.

As further shown in FIG. 14A, a media component 510 is mounted at least partially within the head restraint 502. The media component 510 may be a panel display, a media player, an integrated system of media player and panel display, or any other devices disclosed herein. The media component 510 is shown to be mounted to the support member 504 by an energy dissipating coupling assembly 512 that is described below in greater detail.

FIG. 14B shows a cutaway view of one embodiment of a similar energy dissipating head restraint assembly 520 for a head restraint portion 522 of a fixed bucket-type seat. The energy dissipating assembly 520 includes a support member 524 that facilitates structural integrity of the head restraint 522. Although not shown, the support member 524 may be mechanically coupled to an internal seat frame.

As further shown in FIG. 14B, a media component 530 is mounted at least partially within the head restraint 522. The media component 530 is shown to be mounted to the support member 524 by an energy dissipating coupling assembly 532 that is described below in greater detail.

FIGS. 15A and B now show an example of how one embodiment of an energy dissipating coupling assembly 540 can work during an impact situation. For the purpose of description, a media component 542 is shown to be coupled to a support member 544 by the coupling assembly 540. It will be understood that the manner in which the coupling assembly 540 couples the media component 542 to the support member 544, and the manner in which such a coupling operates, are applicable to the adjustable or fixed head restraints, or any combinations or variations thereof.

FIG. 15A shows how the energy dissipating coupling 540 can couple the media component 542 to the support member 544. In one embodiment, the coupling 540 includes a panel 546 that is coupled to one or more energy dissipating members 550. The panel 546 is adapted to allow mounting of the media component 542 thereto. The energy dissipating member 550 can be adapted to facilitate mounting of the coupling 540 to the support member 544 or a structure associated with the support member 544, thereby providing the energy dissipation means between the media component 542 and the support member 544. It will be understood that the media component 542 may include various forms and types of devices, and various means of mounting such devices may be used.

The media component 542 can be mounted to the panel 546 in any number of ways, including but not limited to, screws, clips, retainers, adhesive, and the like. Also, the energy dissipating members 550 can be coupled to the support member 544 in any number of ways, including but not limited to, screws, clips, retainers, adhesive, and the like.

FIG. 15A shows the energy dissipating coupling 540 in a "non-deformed" configuration—that is, before being subjected to a significant impact. For the purpose of description, energy dissipation can be achieved by deformation of one or more energy dissipating couplings 540. It will be understood that the energy dissipation by deformation can be implemented in any number of ways. It will also be understood that energy can be dissipated in other modes where the deformed part(s) can be at least partially restored, such as in a damped spring type device.

FIG. 15B shows an object, such as a head 552 of an occupant, impacting a portion of the media component 542,

A000059

US 7,597,393 B1

17

thereby imparting a force 554 having a component directed generally towards the support member 544. Energy associated with such a force is shown to be dissipated by a deformation of one or more energy dissipating members 550. Such a deformation of the energy dissipating members 550 can reduce the likelihood and/or the severity of injury by the occupant caused to the impacting head 552.

FIGS. 16A and B now show top views of one embodiment of an energy dissipating coupling 560 that can be used as the coupling described above in reference to FIGS. 15A and B. The coupling 560 includes a panel 562 that can be attached to the media component 542. The coupling 560 further includes one or more tabs 566, where one end of the tab 566 is attached to the panel 562 and the other end of the tab 566 can be attached to the support member 544 or a structure associated with the support member 544. The tab 566 defines a bend 564 that can deform when subjected to a force generally between the two ends of the tab 566.

FIG. 16B shows an impact situation (where the head 552 impacts the media component 542) that causes such a deforming force (554 in FIGS. 15B and 16B). The bends 564 of the tabs 566 are shown to be deformed by at least a portion of the energy associated with the impact force 554.

FIGS. 17A-D now show an example energy dissipating coupling 570 having a plurality of deformable tabs 574. The coupling 570 includes a panel 572 that defines a plurality of mounting holes 576 that facilitate mounting of a media component (not shown). The panel 572 may include a lip 580 along an edge for improved rigidity of the panel 572.

In one embodiment, the plurality of tabs 574 are formed as extensions from the panel 572, such that a distal end 582 of each tab 574 defines a mounting hole 578 that facilitates mounting of the coupling 570 to a support member (not shown). Each tab 574 defines a deformable bend 584 between the distal end 582 and the panel 572 so as to allow energy dissipation by deformation. In one embodiment, the bend 584 defines an aperture 586, where the size of the aperture 586 can be adjusted to adjust the manner in which the bend 584 deforms.

The deformation of the bend 584 depends on factors that include magnitude of the impact force, and the mechanical property of the bend 584. In one embodiment, the coupling 570 is formed from a single piece of an 18-gauge steel. For a given gauge of material (such as the 18 gauge steel), the deformation property of the bend 584 can be adjusted by adjusting the size of the aperture 586 on the bend 584.

Although the foregoing description has shown, described and pointed out the fundamental novel features of the invention, it will be understood that various omissions, substitutions, and changes in the form of the detail of the apparatus as illustrated, as well as the uses thereof, may be made by those skilled in the art, without departing from the spirit or scope of the present invention. Consequently, the scope of the invention should not be limited to the foregoing discussion, but should be defined by the appended claims.

What is claimed is:

1. A media assembly adapted to be installed into a seat back of a vehicle, the assembly comprising:

- a mounting structure that is coupled to the seat back of the vehicle wherein the seat back defines a first outer surface visible to a viewer sitting in a back seat of the vehicle;
- a display that displays media to a viewer sitting within the vehicle;
- a media player having an input opening into which a user can position a media storage device wherein the media

18

player provides signals to the display to thereby induce the display to visually display the contents of the media storage device;

- a housing defining a recess having a first opening that receives both the display and the media player such that the display is positioned proximate the first opening of the recess with the media player positioned inward in the recess from the first opening such that the media player does not impede visual access to the display wherein the housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player and wherein the housing is adapted to be coupled to the mounting structure within the seat back of the vehicle to thereby retain the housing within the seat back such that the display is positioned adjacent the outer surface of the seat back;

wherein the housing defines a second opening and the media player is positioned within the recess such that the input opening of the media player is accessible through the second opening of the housing.

2. The assembly of claim 1, wherein the housing is pivotally mounted with respect to the mounting structure such that the display screen can be adjusted for improved visibility to the viewer.

3. The assembly of claim 2, wherein the housing comprises a ball and the mounting structure comprises a socket such that the ball is positioned within the socket to permit adjustment of the housing with respect to the mounting structure in two separate directions.

4. A media assembly adapted to be installed into a seat back of a vehicle the assembly comprising:

- a mounting structure that is coupled to the seat back of the vehicle wherein the seat back defines a first outer surface visible to a viewer sitting in a back seat of the vehicle;
- a display that displays media to a viewer sitting within the vehicle;
- a media player having an input opening into which a user can position a media storage device wherein the media player provides signals to the display to thereby induce the display to visually display the contents of the media storage device;

- a housing defining a recess having a first opening that receives both the display and the media player such that the display is positioned proximate the first opening of the recess with the media player positioned inward in the recess from the first opening such that the media player does not impede visual access to the display wherein the housing is structured to permit selective access to the input opening of the media player to permit user positioning of the media storage device within the player and wherein the housing is adapted to be coupled to the mounting structure within the seat back of the vehicle to thereby retain the housing within the seat back such that the display is positioned adjacent the outer surface of the seat back;

wherein the housing is pivotally attached to the mounting structure so as to be rotatable between a recessed position wherein the display is positioned substantially flush with the first outer surface of the seat and the input opening of the media player is hidden from view within the seat and an extended position wherein the input opening of the media player is exposed from the seat so as to be accessible to the viewer.

5. The assembly of claim 4, wherein the mounting structure comprises a retainer that defines a recess having two opposed side walls positioned within the seat and wherein the housing

A000060

US 7,597,393 B1

19

is pivotally attached to the retainer at the two opposed side walls to facilitate movement between the recessed position and the extended position.

6. The assembly of claim 5, wherein the retainer defines two opposed side walls and an opposed upper and lower wall and wherein the housing is pivotally attached to the two opposed side walls adjacent the lower wall of the retainer such that the input opening of the media player is positioned proximate the upper wall of the retainer when the housing is in the recessed position.

7. An electronic assembly mounted to a head restraint of a vehicle seat, comprising:

- a media player that retrieves information stored on a media storage device, processes the information, and outputs a signal corresponding to the information;
- a panel display device that receives the signal from the media player and displays a visual representation of the signal, wherein the signal includes an audio component;
- a housing assembly that houses the media player and the panel display device as a substantially single unit, wherein the housing assembly facilitates mounting of the substantially single unit to the head restraint;
- a shell member that allows mounting of the media player and the panel display thereto; and
- a carrier member dimensioned to receive the shell member therein such that the carrier member can be preassembled with the shell member having the media player and the panel display mounted thereto;

20

wherein the shell member is pivotally mounted to the carrier member so as to allow the shell member to pivot with respect to the carrier member; and

wherein the pivoting of the shell member allows pivoting of the media player for insertion or removal of a media storage device to or from the media player.

8. The assembly of claim 7, wherein the media player comprises a digital video disc player that plays a digital video disc.

9. The assembly of claim 7, wherein the media player includes a hard disc storage and plays digital information stored thereon.

10. The assembly of claim 7, wherein the media player reads and plays digital information stored on a memory chip.

11. The assembly of claim 7, wherein the panel display device comprises a flat panel display.

12. The assembly of claim 7, wherein the panel display device comprises a flexible panel display.

13. The assembly of claim 7, wherein the pivoting of the shell member allows adjust of viewing angle of the panel display.

14. The assembly of claim 7, further comprising an external interface that allows interfacing of the electronic assembly with an external electronic component.

15. The assembly of claim 14, wherein the external interface comprises a jack that allows connection with the external electronic component so as to allow the external electronic component to send an external signal to be displayed on the panel display device.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,597,393 B1
APPLICATION NO. : 10/819341
DATED : October 6, 2009
INVENTOR(S) : Tuccinardi et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page, item 76 (inventors), please delete "912," for Roel C. Espina and insert therefore, --902,--.

At column 9, line 40, please delete "Video" and insert therefore, --video--.

At column 13, line 38, please delete "1A," and insert therefore, --11A,--.

At column 13, line 43, please delete "1B," and insert therefore, --11B,--.

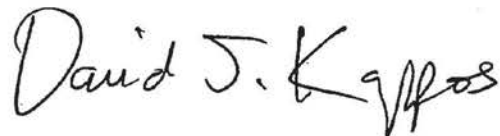
At column 18, line 34, please delete "vehicle" and insert therefore, --vehicle,--.

At column 19, line 28, please delete "therein" and insert therefore, --therein,--.

At column 20, line 20, please delete "adjust of" and insert therefore, --adjustment of a--.

Signed and Sealed this

Eighth Day of June, 2010

A handwritten signature in black ink that reads "David J. Kappos". The signature is written in a cursive, flowing style.

David J. Kappos
Director of the United States Patent and Trademark Office

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 7,597,393 B1
APPLICATION NO. : 10/819341
DATED : October 6, 2009
INVENTOR(S) : Tuccinardi et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

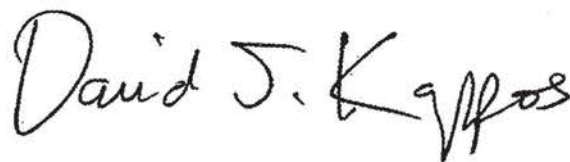
On the Title Page:

The first or sole Notice should read --

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b)
by 1155 days.

Signed and Sealed this

Twenty-eighth Day of September, 2010

A handwritten signature in black ink that reads "David J. Kappos". The signature is written in a cursive, flowing style.

David J. Kappos
Director of the United States Patent and Trademark Office